DOCUMENT RESUME

ED 207 259 EA 014 127

AUTHOR	Louis, Karen Seashore; And Others
TITLE	Strategies for Knowledge Use and School Improvement. Technical Appendices. Linking R&D with Schools
INSTITUTION	Abt Associates, Inc., Cambridge, Mass.
SPONS AGENCY	National Inst. of Education (ED), Washington, D.C. Dissemination and Improvement of Practice Program.
REPORT NO	AAI-78-75
PUB DATE	Jul 81
CONTRACT	400-78-0002
NOTE	145p.; For accompanying volume, see EA 014 125. For related documents, see ED 188 314, ED 192 437, ED 196 134, EA 014 116-131 and EA 014 167.
EDRS PRICE	MF01/PC06 Plus Postage.
DESCRIPTORS	Change Strategies; Data Analysis; Data Collection; Demonstration Programs; Educational Improvement; Elementary Secondary Education; *Measurement Techniques; *Program Evaluation; *Research Methodology; Research Utilization; *Social Science Research
IDENTIFIERS	*Research and Development Utilization Program

ABSTRACT

These technical appendices are bound separately from the report "Strategies for Knowledge Use and School Improvement" which evaluates the National Institute of Education's Research and Development Utilization (RDU) program. Appendix A contains a preliminary report on the statistical quality of the quantitative data, focusing primarily on teacher data. Recommendations for analysis are made. Appendix B explains the scaling and standardization procedures utilized for each key variable in the study. Appendix C discusses the variations in the number of cases due to multiple data sources and the implications of this variation for analysis procedures. Appendix D contains copies of the instruments used in the study: the consolidated coding form, the teacher survey, and the principal survey. Appendix E lists the products adopted by schools in six RDU projects. Appendix F sets forth the criteria for judging the quality of problem solving in the RDU schools. (MLF)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED207259

Linking R&D with Schools

Strategies for Knowledge Use and School Improvement

TECHNICAL APPENDICES

Karen Seashore Louis
Sheila Rosenblum
James A. Molitor
with
Kent John Chabotar
Diane Kell
Robert K. Yin

Abt Associates Inc.

U.S. Department of Education
T.H. Bell, Secretary

Office of Educational Research and Improvement
Donald J. Senese, Assistant Secretary-Designate

NATIONAL INSTITUTE of EDUCATION
Milton Goldberg, Acting Director

Program on Dissemination and
Improvement of Practice
Eunice Turk, Associate Director

Research and Educational Practice Program
Michael B. Kane, Assistant Director
Washington, D.C. 20208-1101

July 1981

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

The work described in this publication was conducted with funding from the National Institute of Education, U.S. Department of Education, under contract number 400-78-0002. The opinions expressed in this publication do not necessarily reflect NIE position or policy, and no official endorsement by NIE or ED should be inferred.

APPENDIX A

AN "AUDIT" OF THE RDU DATA: RECOMMENDATIONS FOR ANALYSIS

Prepared by R. Goodrich

Updated by K.S. Louis and J.A. Molitor

1.0 INTRODUCTION

This is a preliminary report on the statistical quality of the quantitative RDU data, focusing primarily on the teacher data. Recommendations for analysis are made.

2.0 QUALITY OF THE DATA

Three sets of statistical analyses were performed to help shed light on the usefulness of teacher data as indicators of school level effects. These are: variance component generalizability analyses (explained below); school level correlations of 26 variables from CCF, teacher, and principal instruments; and a set of step-wise regressions that use variables from all three instruments as predictors of school level outcomes. The following sections discuss my examination of these materials.

2.1 Generalizability of School Level Means

The purpose of the generalizability analyses was to assess the relative strengths of school level and teacher level/error as sources of variance, and to calculate the generalizability of school level means.

In classical test theory there are two sources of variance -- the testee's "true score" and the testing error (assumed orthoginal to the true test score). Generalizability theory (Cronbach, Gleser, Nanda, and Rajaratnam, 1972) extends classical test theory to the case of more general sources of variance -- not limited to two. Estimation of generalizabilities is conducted via different methods of variance components analysis (while reliabilities usually come from some sort of correlation or the internal consistency -- Cronbach's alpha). One very useful field of application of generalizability theory has been the estimation of class means (Kane and Brennan, 1977), i.e. averages over persons.

In the current application -- estimating the usefulness of teacher level scales as indicators of school level effects -- there are two sources of variance, the school effect and the teacher effect. The linear model

is $Yj(i) = tj(i) + Si + m$ where Yij is the scale value for the j'th teacher in the i'th school, m is the overall mean, Si is the school effect, tj(i) is the teacher effect, and the notation j(i) indicates that j is nested within i. The effects Si and tj(i) are assumed to be zero mean random variables with variances σ^2_S and σ^2_t, respectively. Teacher level error, i.e. the deviation of the teacher response from the true value for that teacher, is confounded with tj(i). The model is quite different from a one way analysis of variance, which would really be an analysis of school level means. In the current application σ^2_t and were σ^2_S estimated for each of 18 constructed scales, via the MIVQUEO method implemented in the VARCOMP procedure of the SAS system.

There are two interesting statistics that can be constructed from these variances. The first is

$$\rho_T = \frac{\sigma^2_S}{\sigma^2_S + \sigma^2_t},$$

which is simply the fraction of the variance of Yj(i) attributable to school level effects. Obviously ρ_T will be very low when the effect is perceived very differently by different teachers in the same school, or where there is a great deal of response error, and high where teachers tend to agree on school level effects.

The second statistic is the generalizability (here, for all practical purposes, synonomous with reliability) of the school level aggregates over teachers. Generalizabilities are extremely important to assist in interpretation of correlational analyses, especially regressions, and to help guide analyses to be conducted. The generalizability of the mean for schools with Nt teachers per school is

$$\rho_S = \frac{\sigma^2_S}{\sigma^2_S + \sigma^2_t / nc}.$$

In preparing the data we used the average number of teachers per school to get a reasonable estimate of the actual average ρ_S over schools.

Table 1 displays the statistics that were computed. In order to interpret them, it is necessary to determine their potential effects on the analyses. The three most problematic influences of imperfect generalizability

TABLE 1

ANALYSIS OF 18 CONSTRUCTED SCALES

Variable	Number of Teachers	Number of Schools	ρ_T	ρ_S
PERSIMP	560	172	.136	.425
SCOPET	456	158	.776	.909
ORGIMP	541	171	.510	.767
TLNKSAT	329	133	.237	.435
TTRAIN	580	177	.339	.627
TUSEFL	580	177	.292	.574
PRODQUAL	381	137	.282	.522
DIFIMP	378	131	.410	.667
LOCDEV	310	131	.143	.283
PUP IMP	303	124	.291	.501
PROBSOL	288	122	.414	.625
T MODUSR	433	148	.021	.060
T MODADM	433	148	.103	.251
TSAT PS	430	158	.286	.521
TCHNGOR	513	173	.246	.491
TCOLLEG	536	175	.189	.417
TTENSE	523	175	.336	.602
TPRINSUP	512	173	.345	.609

are (1) attenuation of correlations, (2) attenuation of statistical power of hypothesis tests, and (3) biasing of regression coefficients.

Attenuation of Correlations

Suppose the true correlation of variables x and y is r(x,y) and that x and y are measured via scales of generalizability x and y. Then

$$\underset{N \to \infty}{\text{Plim}} \; r(\tilde{x}, \tilde{y}) = r(x,y) \sqrt{\rho_x \rho_y} \; .$$

The meaning of this equation is that correlations are attenuated, approximately by $\sqrt{\rho_x \rho_y}$. In order to estimate true correlations one can disattenuate by dividing by $\sqrt{\rho_x \rho_y}$ if this quantity is known. If these figures are known only approximately, then one should simply take this into account in interpreting the correlations.

When correlations involving teacher variables are disattenuated, some very large intercorrelations result. For instance, the uncorrected correlation matrix of three impact variables is

		1	2	3
1	ORGIMP	1	.60	.56
2	PERSIMP	.60	1	.48
3	PUPIMP	.56	.48	1

and the corrected matrix is

1	1.04	.90
1.04	1	1.04
.90	1.04	1

This indicates that, for all practical purposes, the underlying impact variables are virtually identical. They might be usefully combined into a composite variable.

Tables 2a and 2b show the correlations (attenuated and disattenuated) for nine teacher variables. Clearly there is an enormously strong first factor operating. Analyses and interpretation may be threatened by this. A close study of the cluster/factor structure is indicated.

TABLE 2a

CORRELATIONS OF NINE AGGREGATED TEACHER VARIABLES

		1	2	3	4	5	6	7	8	9
1	ORGIMP	-	.60	.49	.23	.52	.56	.63	.50	.34
2	PERSIMP	.60	-	.33	.16	.47	.48	.52	.36	.20
3	TSATPS	.49	.33	-	.32	.41	.32	[illegible]3	.45	.06
4	TLNKSAT	.23	.16	.32	-	.18	.17	.14	.24	.03
5	PRODQUAL	.52	.47	.41	.18	-	.64	.66	.45	.15
6	PUPIMP	.56	.48	.32	.17	.64	-	.92	.41	.26
7	PROBSOL	.63	.52	.33	.14	.66	.92	-	.49	.39
8	TUSEFL	.50	.36	.45	.24	.45	.41	.49	-	.22
9	DIFIMP	.34	.20	.06	.03	.15	.26	.39	.22	-

TABLE 2b

CORRELATIONS OF NINE TEACHER VARIABLES, DISATTENUATED

		1	2	3	4	5	6	7	8	9
1	ORGIMP	-	1.04	.77	.40	.82	.90	.90	.75	.47
2	PERSIMP	1.04	-	.70	.37	.99	1.04	1.00	.73	.37
3	TSATPS	.77	.70	-	.67	.77	.63	.58	.83	.10
4	TLNKSAT	.40	.37	.67	-	.38	.32	.27	.48	.06
5	PRODQUAL	.82	.99	.79	.38	-	1.29	1.15	.83	.25
6	PUPIMP	.90	1.04	.63	.32	1.29	-	1.63	.77	.45
7	PROBSOL	.90	1.00	.58	.27	1.15	1.63	-	.82	.60
8	TUSEFL	.75	.73	.83	.48	.83	.77	.82	-	.36
9	DIFIMP	.47	.37	.10	.06	.25	.45	.60	.36	-

Statistical Power

The power of the statistical hypothesis test Ho:r(x,y) = 0 is attenuated as a curvilinear function of true r(x,y) and $\sqrt{\rho_x \rho_y}$. Table 3 exhibits the power of the test as interpolated from tables given by Cohen (1977). His labels "small", "medium", and "large" are assigned to the true correlations .1, .3, and .5, and we added the label "very large" for r = 7.

The table shows that in any case, only a small fraction of small effects will be detected statistically. With perfect generalizability, nearly all medium or larger effects will be detected. When $\sqrt{\rho_1 \rho_2}$ is .5 or better nearly all large or very large effects will be detected but many medium effects will be missed. When $\sqrt{\rho_1 \rho_2}$ falls to .2 or less then only a fraction of even very large effects will be seen.

Our judgement is that all of the variables in Table 1 are useful wtih the exception of T MODUSR. The variables T MODADM and LOC DEV are marginal. The remaining 15 (of 18) are sufficiently generalizable ($\rho > .4$) to give rejection of the null hypothesis substantial meaning as evidence that the null hypothesis is in fact true.

To judge actual effects of diminution of statistical power, I examined the correlation matrix of 26 selected variables from all three data sources. For nine teacher variables, generalizabilities were available. I plotted the fraction of significant correlations that each of the nine had with the 26 variables excluding the unit self correlations. The results are on Figure 1.

From the obvious relation between ρ and fractions of significant relations I concluded that nearly all true correlations are strong and that the observed correlations were attenuated mostly by generalizability effects.

I confirmed this conclusion by estimating the central tendency of the product ρ_{xy}^2 over the set of 9x25 such products involving teacher variables. I calculated $\rho_{xy}^2 \sim .45$, astonishingly high. It would be unlikely that the generalizability of the 26-9 = 15 nonteacher variables averages less than .8. The vast majority of correlations among the 26 "true" variables appear to be statistically and practically significant. Average effects must be large to very large.

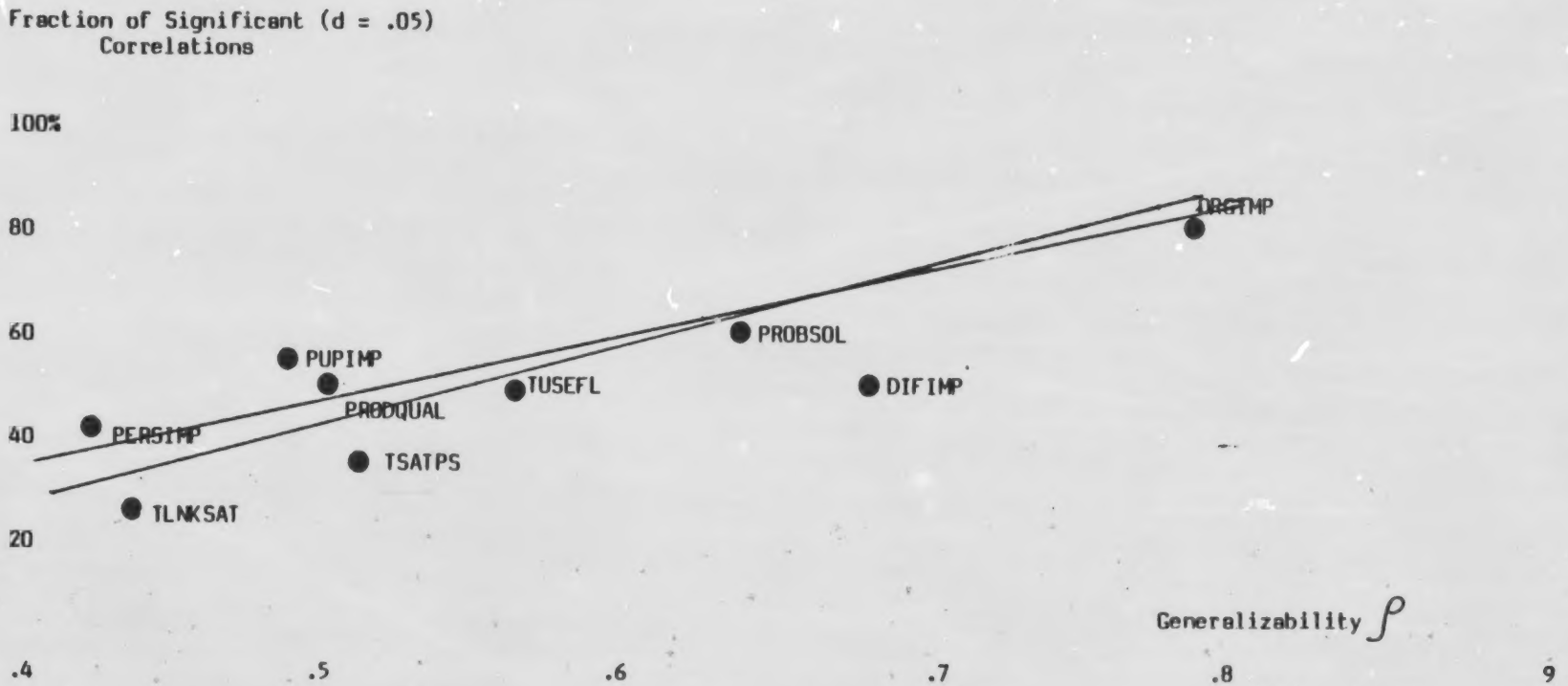
TABLE 3

POWER OF TEST r=0, n=100, d=.05 as a FUNCTION OF

$\frac{r(x,y)}{\sqrt{P_1 P_2}}$	Small .1	Medium .3	Large .5	Very large .7
1	.26	.92	1.00	1.00
.7	.17	.67	.96	1.00
.5	.12	.43	.80	.96
.3	.09	.22	.42	.67
.2	.06	.13	.26	.38
.1	.05	.09	.12	.17

Figure 1

Nine Aggregated Teacher Scales: Fraction of
Significant (d = .05) Correlations with 25 Other Variables



Examination of Stepwise Regressions

A set of stepwise regressions was conducted in which independent variables were classified into three groups: linker, product, and process. Examination of the results leads to the following conclusions:

(1) The teacher process variables have little predictive power (average R^2 = .03)

(2) The Principal Product variables have little predictive power (average R^2 = .01)

(3) Overall, the CCF variables have most predictive power.

Only two of the teacher process variables (T MODUSR, T MODADM) were included in the generalizability analyses. They had the two lowest generalizabilities (.061 and .251, respectively) of any of the 18 computed. From this we judge that the failure of the teacher process variables to predict outcome is due to their low generalizabilities.

Although we can't compute generalizabilities of the CCF or Principal variables we judge them (except for Principal Product variables) equal or superior to the teacher variables. CCF variables appear, overall to be the strongest. Thus except for the two groups identified above, the variables appear to be very sound, especially for questionnaire derived data.

3.0 INTERPRETATION OF REGRESSIONS

It is clear that (a) there is considerable multicolinearity among the "true" variables that the scales estimate and (b) the generalizabilities are mostly in the .4 to .9 range -- very good but not perfect. The result of these two facts is that estimates of regerssion coefficients will be badly biased -- nearly always. Interpretation of B's from models with more than two or so regressors will be nearly impossible. In models with one regressor the B estimates can easily be debiased via the Lord-Porter disattenuation. With more regressors the debiasing computations are complex but possible. In any case we need the values for generalizabilities -- which can be estimated only for the teacher variables. I would recommend the correction, however, in models using solely teacher variables as regressors.

5.0 UPDATE

On the basis of this and some additional analysis, the following steps were taken to create a final data base for analysis.

First, based on the recommendations presented above, teacher process variables were dropped from the data analysis plans. LOCDEV, which refers to the amount of local development of materials, was considered too critical to drop, although it has marginal generalizability.

Second, a decision was made to proceed with our original intent, which was to aggregate individual teacher responses to the school level, and merge them with principal survey data, and data obtained from the CCF (see Chapter 3).

Third, to deal with the observed multicollinearity of variables, rather than creating new scales within each data file, it was decided to scale across teacher, principal and CCF data. This process reduces multicollinearity considerably, but does not decrease the predictive power of our data (see Exhibit A-1).

Fourth, a decision was made to proceed with estimations of missing data, based on the recommendations of the audit. The procedure used was as follows:

- variables were classified into groups, based on the model that formed the basis for our analysis (see Figure 2-2, p. 35).
- within each variable group, regressions were performed on each variable for which there was a substantial amount of missing data. The regressors were limited to other variables within the same group.
- estimations of the value of the missing numbers were made using the regression coefficients from each regression equation. The formula for the estimation procedure was:

Exhibit A-1

TO: Karen, Sheila, Diane
FROM: Jim
RE: Data reduction; plugging missing data
DATE: 11/12/80

Before taking off for the conference in Nashville, I rampaged through the 21 outcome measures we've been working with and reduced them to 10, as follows:

Old scale names	New scale name
ORGIMP PORGIMP SCOPE6CC	ZORGIMP: org impacts
PERSIMP	PERSIMP (no change): personal impacts
NUPROC BT28B	ZPROCINC: incorporation of process
PRGINC BT9 SCOPE5CC	ZPRGINC: incorportation of adopted program
SCOPE SCOPET SCOPE1CC	ZSCOPE: scope of implementation
PSATPS TSATPS	ZSATPS: site satisfaction with ps process
PROBSOL PPRBSOL	ZPROBSOL: site report problem solved
PUPIMP	PUPIMP (no change): pupil impacts
PLNKSAT TLNKSAT	ZLNKSAT: site satisfaction with linker
BT28A	BT28A (no change): % teachers saying RDU different

Reductions were accomplished by standardizing raw scales and adding them then taking the average. Thus, if a case were missing one or two of the old scales, it would still have a valid value on the new scale. New scales are not affected by differences in range among the raw scales, and distributional properties are made more stable. The missing data problem for outcome measures is appreciably reduced, at least in most cases, with upwards of 30 cases added for some outcomes. Finally, multicollinearity variables from the same source was reduced. Note that if you use any of these new scales, they range from about -3 to +3 with a mean of 0 (standardized, you know).

I have run the regressions represented in the charts passed out earlier this week, but have not tabled the results yet. A summary chart of R^2 for the stepwise regressions is attached, however, and shows that our predictive power is about the same, i.e., a variable like, say, ZORGIMP has average R^2s about the same as those shown for its three constituent raw scales. This will probably not change when the plugging of independent variables is completed, though N's will be better.

Although the number of outcomes is cut in half, we may still want to drop a scale or two, though I can only suggest BT28A.

Proportions of Variance in Outcome Measures
Explained by Sets of Treatment Indicators:

R^2 from Stepwise Regressions
With Teacher, Principal and CCF Data

	Process vars (C)	Process vars (T)	Process vars (P)	Product vars (C)	Product vars (T)	Product vars (P)	Linker vars (C)	Linker vars (T)	Linker vars (P)
Impacts on participating staff	.05	.03	.03	.31	.24	0*	.01	.05	.08
Impacts on school as organization (T)	.21	0	.08	.43	.36	.03	.05	.06	.03
Impacts on school as organization (P)	.08	.005	.20	.23	.10	.01	.07	.03	.18
Revised process incorporation	.09	.05	.18	.10	.06	.01	0	.01	.20
Process incorporation 1 (P)	.09	.08	.11	.10	.05	0	0	0	.12
Process incorporation (T)	.08	0	.04	.32	.02	.04	.02	.01	.03
Program incorporation (P)	.12	.07	.07	.45	.14	.01	.16	.02	.02
Program incorporation (T)	.20	.02	.06	.26	.24	0	.14	.06	.02
Program incorporation (C)	.21	.09	.04	.48	.14	0	.10	.01	.05
Impacts on school as organization (C)	.29	.11	.10	.59	.20	0	.12	.05	.05
Scope of implementation (P)	.06	.02	.05	.25	.09	.01	.13	0	.06
Scope of implementation (T)	.08	.01	.02	.13	.34	0	.28	.03	.01
Scope of implementation (C)	.21	.05	.08	.35	.29	0	.30	.10	.05
Principal satisfaction with process (P)	.05	.03	.11	.37	.08	.01	0	.07	.39
Teacher satisfaction process (T)	.03	0	.02	.17	.25	0	.02	.01	0
Principal satisfaction with linker (P)	.09	0	.06	.18	.11	.01	.16	.12	.46
Teacher satisfaction with linker (T)	.05	.03	.05	.20	.05	0	.07	.08	.15
% teacher report RDU very different	.17	0	.08	.06	.03	0	.04	.18	.05
Pupil impacts (T)	.06	0	.02	.30	.46	.09	.09	0	.01
Principal reports problem solved (P)	.34	.03	.06	.30	.27	.05	.09	.13	.04
Teacher reports problem solved (T)	.10	0	.04	.20	.54	.08	.06	0	.02

*0 means no variables entered

Proportion of Variance in Outcome Measures
Explained by Sets of Treatment Indicators:

R^2 from Stepwise Regressions with
Standardized Outcomes Combining Teacher,
Principal and CCF Data

	PREDICTOR SET				
OUTCOME	CCF Process	CCF Products	Teacher Products	CCF Link	Principal Link
ZORGIMP	.33	.54	.30	.08	.12
ZPRGINC	.30	.47	.19	.15	.01
ZSCOPE	.17	.39	.39	.36	.01
ZPROCINC	.10	.28	.05	0*	.08
ZSATPS	.01	.31	.17	0*	.10
ZPROBSOL	.15	.19	.47	.07	.03
ZLNKSAT	.02	.12	.12	.14	.39

* 0 indicates no variables entered the regression.

RDU Independent (Treatment) Variables

Linker variables--

P: Linker contact with principal
Linker initiative

T: Pct. teachers reporting contact with linker

C: Linker contact with local action team
Level of linker influence

Product variables--

P: Principal's report a product was adopted
Principal's report the program was difficult to implement

T: Teachers' report a product was adopted
Need for modifications to product
Product quality (scale)
Difficulty of implementation (scale)
Need for local development of materials (scale) [-]

C: Was product validated
Relative advantage
Did program match problem for which it was selected
Program complexity
Implementation reversability [ ]
Extent of preimplementation modifications
Extent of postimplementation modifications
Adequacy of guides for implementation [+]
Difficulty of implementation

Process variables--

P: Principal's involvement in PID
Principal's involvement in Sol. sel.
Principal's involvement in PFI
Principal's involvement in Implementation

T: Teacher participation in modifications to product
Administrator participation in modifications to product

C: LAT involvement in problem solving
Teacher influence in problem solving
Principal influence in problem solving
LAT influence in problem solving
Level of problem solving effort
Quality of problem solving process
Breadth of problem solving participation

As will be discussed in Appendix C, this estimation procedure (which was not performed for all variables due to its expense) does not eliminate problems of missing cases due to lack of complete overlap between our various data bases (CCF, teacher and principal surveys). Thus, we were left with a missing data problem that was reduced, but not eliminated.

BIBLIOGRAPHY

Cronbach, L.J., Gleser, G.C., Nanda, H., and Rajaratnam, N., The Dependability of Behavioral Measurements: Theory of Generalizability for Scores and Profiles, New York: Wiley (1972).

Kane, M.T. and Brennan, R.L., "The Generalizability of Class Means," Review of Educational Research, 47, p. 267-293 (1977).

Cohen, J. Statistical Power Analysis for the Behavioral Sciences, Revised Edition, New York: Academic (1977).

APPENDIX B

Scaling Independent and Dependent Variables

APPENDIX B

1.0 COMPUTATION OF OUTCOME MEASURES

As the discussions of our study of the RDU project presented in the body of this report suggest, we were faced with a large amount of data, from a variety of sources, related to the RDU treatment itself, possible outcomes of the RDU program at the individual and site levels, and the characteristics of the school sites themselves. In many cases, data on the same dimension were available from more than one data source. This was deliberately built into the design of the study so as to enable us to "triangulate" on measures critical to our analysis. That is, we wished to ensure that data from principals and teachers, for example, or from principals and our own project staff visits to participating schools, were strongly correlated.

We were also faced with the problem of too much data and too little time and resources to analyze each and every relevant item in detail. We also knew that some of our measures would be of greater analytic utility than others. Thus, we faced a serious data reduction task. In addition, we knew that some data would be missing, e.g., we might have teachers' assessments of some variable, but not the principal's because of non-response to our surveys or lack of knowledge on the topic when we conducted face-to-face interviews at some sites.

To deal with these problems, we utilized simple scaling and standardization procedures discussed below, for each key variable, in detail. The general strategy was to reduce batteries of items in our instruments to scales, either through summing, averaging, or counting as these seemed appropriate. Since our primary unit of analysis was the school rather than the individual staff member participating in the RDU program, we then developed school-level measures (in the case of the teacher survey data) by such techniques as averaging across teachers within schools or taking the proportion of teachers at each school who gave a certain response. Thus, a group of teachers would be "pooled" to generate a single observation of some aspect of their school's RDU experience. (Note that the data from principals and from our own staff's consolidated coding form--the CCF--were already at the school level.)

Although in many cases there were virtually identical items in the teacher and principal surveys, this was not always the case. Nor did the CCF data correspond absolutely with the data from principals and teachers (aggregated to the school level). To deal with such inconsistencies along with a certain amount of missing data became an important data management task. We also wished, in our analysis and reporting, to address the question of the relative importance of different variables in terms of affecting site outcomes.

Our solution to this set of data management complexities was to standardize site level data (including aggregated teacher data) so that difference in, say, scale and range, between data sources addressing the same substantive issues were relieved. This procedures also enabled us to make direct comparisons of the analytic utility scales tapping several dimensions in a single outcome analysis, for example, by examining the size of the Betas (standardized regression coefficients) in any given regression analysis. Finally, problems of missing data were alleviated by being able to average standardized scales from different data sources dealing with any given site. Thus, if we had principal and CCF data on organizational impacts (or any other combination of data) we were able to take the arithmetic mean of available data as the final site level measure to be included in our analysis. This will become clearer as we discuss the computation of specific site level measures in the rest of this Appendix. This was done only for variables that were strongly intercorrelated (simple correlations significant at .05 of better).

Satisfaction With the Services of the Linking Agent

Linking agents performed a varying set of services for their sites. To obtain a measure of how satisfied the staff at these sites were with these services, the surveys of principals and teachers asked respondents to indicate how well they felt the linker performed at each of the activities listed in Figure X-2. Linkers were rated "poor" (1) to "excellent" (5) on each item.

The respondents' satisfaction score was the arithemetic mean of these ratings. This was done for both principals and teachers in each school. Teachers' satisfaction scores were then averaged within schools to generate a school level measure of teachers' satisfaction with the linker.

Figure X-2

LINKER ATTRIBUTES OR ACTIVITIES

a. Ability to explain clearly the purposes and services of the GRDUP

b. Helpfulness in specifying, analyzing and diagnosing our particular problems or needs

c. Helpfulness in developing criteria for selecting the solution best suited to our needs

d. Helpfulness in locating alternative solutions to our problem

e. Helpfulness in finding the best match between our problem and a solution

f. Ability to help us understand how the R&D program or materials could be used

g. Helfulness in adapting the R&D program or materials to our school or school district

h. Helfulness in implementing the new program or materials

i. Assistance in locating additional technical resource persons

j. Availability to us when we need to talk to him/her

k. Ability to resolve conflicts fairly

l. Skills as an organizer or coordinator

m. Assistance in evaluating our program

Finally, the school level teachers' linker satisfaction measures and the principals' linker satisfaction measures were standardized to unit variance about a mean of zero. The arithmetic average of these standardized measures constitutes the final site level measure of satisfaction with the linkers' services used in the analyses we report.

Scope of Product Implementation

Another measure of the impact RDU had on schools used in this report is the "scope of product implementation." This measure was generated so as to reflect an assessment of the percentage of the students exposed to the adopted program and the amount of time (each week) they spent using the product or materials. Both principals and teachers were asked to provide these data.

The scope measure was calculated by multiplying the reported percentage of pupils affected times the average number of minutes per week the product or materials were reported to be used. Teachers' scope scores were averaged within schools to generate school level measures of teachers' scope of implementation. Our staff also rated the schools we visited on their scope of product implementation by rating the percentage of pupils affected and the level of product use.

Finally, the principals' scope scores, the school level teachers' scope scores and our scope ratings were standardized to unit variance about a mean of zero. The arithemetic average of these standardized measures constitutes the final site level measure of scope of product implementation used in our analyses.

Satisfaction With the Problem Solving Process

Principals and teachers were also asked to provide overall assessments of how they felt about the problem solving activities they had been through. Since teachers and principals tended to be involved in the local problem solving process in ways that were different both quantitatively and qualitatively, the relevant questions they answered were also different.

Principals were asked how satisfied they were (1 = not satisfied; 5 = very satisfied) with the assistance or support from five individuals or groups:

- the local school team;
- the linking agent;
- RDU project staff (excluding the linker);
- developers of R&D based programs or materials; and
- other outside organizations or consultants.

The principals' scores were calculated by taking the sum of these five ratings.

Teachers were often more directly involved in carrying out the problem solving activities. To tap their feelings about this experience they were asked whether each of a set of activities took the appropriate amount of time as opposed to too little or too much time. These activities included:

- identifying the most important problems or needs;
- establishing criteria for selecting solution;
- searching for an R&D based program or materials;
- selection of an R&D based program or materials; and
- planning for implementation of the R&D based program.

The teachers' scores were calculated by counting the number of these activities which they said took "about the right amount" of time. Teachers' scores were then averaged within schools to generate a school level measure of teacher satisfaction with the problem solving process.

Finally, principals' scores and school level teachers' scores were standardized to unit variance about a mean of zero. The arithmetic average of these two standardized scores at each site was taken as the final site level measure of satisfaction with the problem solving process for our analyses.

Extent the Problem Has Been Solved

The R&D products and materials implemented were selected because, in most cases, the local action team felt that these materials would at least help to alleviate the problem their school had chosen to work on. As part of the surveys of principals and teachers, respondents were asked about the extent to which the following had occurred (from 0 = "not at all" to 4 = "to a very great extent"):

1) Has implementation of the program or materials helped solve the most pressing problem in your school?

2) Has pupil achievement improved as a result of the use of the program or materials?

3) Have pupil attitudes or behavior improved as a result of the use of this program or materials?

For both teachers and principals, the "problem solved" scores were calculated by taking the sum of the ratings for the three items cited above. Teacher responses were then aggregated to produce school level measures of teachers' assessments of the extent to which the problem was solved by taking the arithmetic average of the individual teachers scores within schools. Finally, both principals' scores and school level teacher scores were standardized to unit variance about a mean of zero, and the arithmetic average of these two standardized scores was used as the final measure of the extent to which the problem was solved in our analyses.

Personal Impacts on Participating Staff

Our earliest site visits revealed that the RDU program was having a variety of effects on participating staff that were not part of the program's originally intended outcomes. To make a global assessment of the effects of the program on local school staff, respondents to the teacher survey were asked about the extent to which they had personally benefitted from their school's involvement in the RDU program (0="not at all" to 4="to a very great extent") in the following ways:

a. My teaching skills have improved
b. My leadership skills have improved
c. I have learned about curriculum development
d. I have more self-confidence
e. Other school personnel rely on me more
f. I have new resources for helping other staff members
g. I have learned more about the problem solving process
h. I have learned more about the availability of R&D based programs or materials
i. My job is more satisfying
j. I have been given more responsibility or have been promoted.

Individual teachers' scores were calculated by taking the arithmetic mean of their responses to these ten items. School level measures of program impact on staff were generated by taking the mean of the teacher responses within

schools. These were then standardized to unit variance about a mean of zero, and the resulting scale used as the final school level measure of program impacts on participating staff.

Incorporation of the Adopted R&D Product or Materials

One of the principal aims of the RDU program was to see that R&D products were adopted to solve locally defined problems and that these products be used on a continuing basis--i.e., incorporated--subsequent to implementation. Because of the importance of this outcome, it was measured in three different ways: in the survey of principals, the survey of teachers, and in the CCF data.

Building principals were asked whether any steps had already been taken or were planned to ensure that the adopted R&D materials would continue to be used in the future. Specifically, principals were asked to rate whether the following would not occur (1), may occur (2), would definitely occur in the near future (3), or had already occurred (4):

a. The program or materials have been formally incorporated into curriculum plans.

b. We have developed written guidelines for the use of the materials and methods from the program.

c. New staff will receive training or orientation in the use of the R&D program materials or methods.

d. We will continue to have training programs or inservice for current staff members to maintain the use of the program, materials or methods.

e. We have purchased new materials and supplies in order to maintain our use of the program or materials.

f. Because of the use of the program or materials written job descriptions for some staff members have been changed.

g. We have hired new staff members specifically to support the use of the R&D program or materials.

h. Our budget now includes a separate line item to support the use of the R&D program or materials.

The principal's score on incorporation of the R&D materials consisted of the proportion of these steps--i.e., how many out of the eight possibilities--were rated as having already occurred.

Teachers were asked whether they planned to continue using the adopted R&D materials in the future, and if so, whether they would use it with little or no modifications, some modifications, or major modifications. The school level teachers' measure of product incorporation was calculated by taking the proportion of teachers in each school who indicated they would continue using the materials without major modifications.

In the CCF data, product incorporation was assessed by our staff in terms of the likelihood that over the next few years, the product would be dropped (1), whether some or all teachers would use the product, but not extensively (2), or whether some or all teachers would use the product extensively (3).

All three measures were standardized to unit variance about a mean of zero. The arithmetic average of these standardized measures was taken as the final school level measure of product incorporation.

RDU Program Impacts on the School As an Organization

Like the RDU program impacts on participating staff, impacts on the schools as organizations were readily observable in our early site visits, and our study design was revised to include assessing such impacts. To triangulate on these unintended program effects, measures of organizational impact were built into the survey of principals, the survey of teachers, and the CCF data.

In both the survey of principals and the survey of teachers, respondents were asked to rate how a number of factors or characteristics had changed in their schools as a result of the school's involvement in the RDU program on a scale from 1 (got very much worse) to 5 (got very much better). These factors or characteristics were:

a. Curriculum
b. Available materials
c. Teaching methods you use in your classroom
d. The way your classroom is organized or managed*
e. The way your school is organized or managed
f. Degree of participation of teachers in making decisions about this school
g. Frequency of communication among teachers about curriculum, teaching techniques and lesson planning

*Not included in principal's survey.

h. Morale of the staff

i. The way specialists are used in your school

j. The ways in which problems are solved in your school

k. The image of the school in the community

Teacher and principal scores were calculated by taking the average of their respective ratings of the changes RDU produced in these factors. The school level teachers measure of organizational impact was generated by taking the arithmetic average of teachers' scores within schools.

The CCF measure of organizational impact was based on an expanded but similar battery of items, rated the same way. The CCF items were:

a. Staff knowledge of problem-solving practices

b. Staff awareness and acceptance of R&D products

c. Pupil performance and behavior

d. Teacher morale

e. Frequency of interstaff communication

f. Curriculum and/or materials

g. Teaching methodologies

h. Organizational structure

i. Teacher participation in decision-making

j. School's image in the district

k. Severity or scope of the problem

l. Use of specialists

m. Community or parent involvement

n. Classroom organization or management

o. Other (specify):

The three measures of organizational impact were standardized to unit variance about a mean of zero. The arithemetic average of these three standardized scales was taken as the final school level measure of organizational impact.

Incorporation of the RDU Problem Solving Process

Along with incorporation of an R&D product into normal school operations, the incorporation of more rational and broadly participatory decision making practices at the school level was a prime aim of the R&D Utilization Program. Data on incorporation of the process was drawn from two sources, the principal survey and the teachers' survey.

In the principal survey, respondents were asked to indicate how likely it was that their school would use several aspects of the RDU approach to problem solving to address future needs. Each aspect was rated on a scale ranging from 1 (will definitely not use) to 4 (definitely will use). The process aspects were:

a. The use of a team or committee of teachers and administrators.

b. The use of the services of an external linker.

c. The approach to the process of identifying and improving in this school.

d. The approach to identifying possible solutions to our problems.

e. The approach to making a decision among alternative solutions to a problem.

f. The approach to planning for implementation.

g. The approach to implementation and feedback.

The principal's score for process incorporation was calculated by taking the proportion of aspects--i.e., how many out of 7--the principal indicated would definitely be used again.

In the teachers' survey, respondents were asked to assess the extent to which the RDU problem solving approach had been used to address other school problems. The school level teachers' measure of process incorporation was derived by taking the proportion of teachers at each school who indicated they were using all or part of the RDU process to solve another problem, or had definite plans to do so in the future.

Both the principals' and the teachers' measures were standardized to unit variance about a mean of zero. The arithmetic average of these two standardized scores was taken as the final school level measure of incorporation of the RDU problem solving process.

Need for Local Development of Materials

A measure of local adaptation of the adopted products and materials was developed by having teachers rate the extent to which the following statements about the adopted program were true:

- it was necessary to use materials from several R&D based programs in order to meet your need or solve your problem;

- it was necessarsy to develop additional materials locally in order to meet your need or solve your problem;
- modifications were required to use the program and materials in your school.

These items were rated from 0 = "not at all" to 4 = "to a very great extent." The teachers' scores were computed by summing the ratings across these three items. The school level measure was computed by taking the arithmetic mean of the scores of teachers within the school. This was then standardized to unit variance about a mean of zero.

2.0 INDEPENDENT SCALES

Principal's Influence on Decisions
Teachers' Influence on Decisions
Central Office Influence on Decisions
Local Action Team's Influence on Decisions
Influence on Faculty as a Whole on Decisions

In the problem solving activities, it was possible for a variety of actors to exert influence over the decisions made during the problem identification, solution selection, and planning for implementation phases at each participating school. The CCF data include assessments by our own project staff of the amount of influence of each such role group during each phase, rated on a three point scale: 1 = none or very little influence; 2 = some influence; and 3 = a gread deal of influence. Separate influence scales were developed for each potential role: building principals, teachers as a group, the local action team, the faculty as a whole, and the district central office (including the superintendent and other district level staff).

For each role group, an influence score was calculated by summing the ratings of that group's influence over the three phases. The resulting scales were then standardized to unit variance about a mean of zero.

Principal's Involvement in Problem Solving Activities

A major feature of the RDU project was its attempt to get school staff and administrators involved in a series of problem solving activities. As part of the survey of principals, respondents were asked to indicate the level of their personal involvement in four types of activities:

a. identifying the most important problem or needs;
b. searching for and choosing an R&D based program or materials;
c. making plans for how best to implement the chosen R&D based program or materials; and
d. actually implementing the program or use of materials.

Principals were asked to rate their own level of involvement on a five-point scale for each type of activity, where 1 = no involvement and 5 = high involvement. The scale was calculated by summing the principal's self ratings, and then standardizing to unit variance about a mean of zero.

Scope of Involvement in Problem Identification
Scope of Involvement in Solution Selection
Scope of Involvement in Planning for Implementation
Scope of Involvement in Implementation

An important aspect of the improved problem solving process which the RDU program promulgated was a broadening of participation in local decision making. That is, the RDU approach aimed at involving as many role groups as possible in the decision making process. The CCF data reflect the involvement of five role groups in discussions, making decisions, and carrying out tasks related to the process: the superintendent/assistant superintendent; other district level staff (such as curriculum specialists, subject area coordinators, etc); building principals/assistant principals; teachers; and other school level staff, such as guidance counselors, librarians, etc.

Each such role group was rated on the extent to which they were actively involved during each phase using a four point scale: 1 = to little or no extent, 4 = to a very great extent. The scope (or breadth) of involvement for each phase was scored by summing the involvement ratings of these five groups. The resulting scales were then standardized to unit variance about a mean of zero.

Level of Effort Devoted to Problem Solving

A measure of the level of effort devoted to problem solving was calculated by estimating the number of person days expended on problem solving activities during each phase at each school on which CCF data were available. (The surveys of principals and teachers did not include such estimates.) For each phase, fewer than 10 person days was considered a low level of effort and was coded "1"; 10-30 person days was considered a medium level of effort and was coded "2); finally, a level of effort in excess of 30 person days was considered high and coded "3".

The measure of level of effort was computed by summing the codes (from 1 to 3) so generated over the problem identification, solution selection, and planning for implementation phases. This score was then standardized to unit variance about a mean of zero.

Quality of Group Decision Making Practices

The RDU program's aim of improving local decision making practices included two components: making the problem solving activities more rational, and making the participation in decision making more broadly representative of the groups who would be affected by the decisions made. The criteria for assessing the quality of group decision making processes included the following:

- a formally constituted group empowered to make decisions;
- regular meetings, well attended;
- representation in the group of those who will be affected by its decisions;
- collective deliberation and democratic decision making;
- effective conflict management;
- decisions not subverted by administrators; and
- continuity of group membership.

For each phase of the problem solving activities, the CCF data include ratings, based on these criteria, of the extent to which the school's problem solving activities were congruent with sound group decision making practices. The four point rating scale ranged from 1 = "to little or no extent" to 4 = "to a very great extent."

The overall rating of the quality of group decision making at each site consisted of the sum of the ratings for the problem identification, solution selection, and planning for implementation phases. This sum was then standardized to unit variance about a mean of zero.

Quality of the Problem Solving Practices

The second component of the RDU program's intended improvements in local decision making was the emphasis on rationality in the problem solving. The CCF data included ratings of the soundness of the problem solving practices at each stage. Since the content of the decision making

varied by stage, the criteria for soundness of problem solving practices also vary by stage. Sample criteria for soundness of problem identification include:

- problem specification and needs assessment prior to searching for a solution;
- consideration of alternative definitions of the problem;
- obtaining adequate evidence of the problem's existence;
- developing a definition of the problem which is clear, manageable, and relevant--neither too trivial nor too grandiose.

During solution selection activities, other criteria become relevant, such as:

- obtaining evaluation evidence of a solution's effectiveness;
- careful examination of alternatives;
- the solution is manageable given cost or other constraints;
- the solution is relevant to the problem statement;
- the solution is acceptable to a majority of those affected by its solution.

Finally, during planning for implementation, still other criteria come into play, such as:

- realistic assessment of constraints on implementation;
- gaining administrative support and cooperation;
- detailed formal plans are drawn up;
- measures are taken to ensure the chosen product retains its <u>essential</u> features; and
- adaptations before or after implementation are appropriate to the situation.

Calculating a score for a site's quality of problem solving activities was done by rating the site on the extent to which their activities conformed to the criteria relevant to each stage. Conformity to sound problem solving at each stage was rated on a scale of 1 = "to little or no extent" to 4 = "to a very great extent." These ratings were then summed over the problem identification, solution selection, and planning for implementation phases, and the resulting scores standardized to unit variance about a mean of zero.

Level of Linking Agent Activity and Initiative

Linking agents performed a varying array of services at the schools with which they worked during the RDU project. Since they constituted one of the primary RDU "interventions" or "treatments", it was of great interest to develop a measure of the level of effort linkers expended at these sites, along with an estimate of their level of influence over the local decision making process. To obtain such measure, linkers were rated on the extent to which they performed each of the following services at site represented on the CCF data base:

- Providing (not arranging for) training in problem solving or group process
- Providing (not arranging for) training in a curricular area
- Facilitating the group process-e.g., by resolving conflicts, guiding discussions, helping to set goals
- Coordinating/lining up resources (human or material)
- Providing expert counsel/technical assistance related to:
  - Diagnosing the problem
  - Assessing the match between innovations and problems
  - Implementing an innovation
  - Evaluating solution implementation or effectiveness
- Providing assistance such as interviewing, helping with proposals, etc.
- Serving as a communications link/liaison between school and project.

The ratings were from 1 = "to little or no extent" to 4 = "to a very great extent." Similar ratings on the extent to which the linker became heavily involved and assumed direct leadership of the local process, and the linker's importance in helping the school to accomplish its problem solving activities were also made, along with ratings of the linker's influence over decisions at each stage.

These ratings were then summed to produce a general measure of linking agent activity and initiative. This score was then standardized to unit variance about a mean of zero.

Amount of Linking Agent Time on Site

Another measure of the level of linker effort devoted to each school was computed from the CCF data by rating the linker's frequency of face-to-face contact with school staff during each phase of the problem solving process. Frequency of contact was coded as follows: 1 = "less than once per month;" 2 = "at least once per month;" 3 = "once per week;" 4 = "2-3 times per week;" and 5 = "more than three times per week."

Amount of linking agent contact with the local action team was scaled by summing these codes across the problem identification, solution selection, and planning for implementation stages. This scale was then standardized to unit variance about a mean of zero.

Amount of Linking Agent Contact with the Principal

In the survey of principals, a single item asked the respondent to indicate the frequency with which he or shee personally had face-to-face contact with the linking agent. The four point scale ranged from 1 = "no contact" to 4 = "a lot of contact." This was standardized to unit variance about a mean of zero.

Linker Innovativeness

Linker's Political Orientation to Change

Linker's Individual Orientation to Change

Linker's Structural Orientation to Change

A variety of linkers' job related attitudes were examined in relation to various school level outcome measures. The measure of linker innovativeness was taken from Price (1972) and involves the forced choice selection between pairs of adjectives describing the respondent's behavior. Relevant data were drawn form the surveys of linkers.

Four innovative characteristics (independent, flexible, original, and self-reliant) were paired with four conventional characteristics (dependable, cooperative, industrious, and stable). The battery was scored by adding the number of times an innovative adjective was selected over a conventional adjective.

Linkers' scores on the structural, political, and individual orientations to change were measured by asking the agent, in the linker surveys, to complete a set of six forced-choice questions. Each question paired a statement reflecting one of the perspectives with a statement reflecting another perspective. Each time the linker made a choice, he or she was given a score of 1 for the orientation that they chose. Thus, the possible range for each orientation was between 0 and 4. The items for each perspective were:

- Political perspectives
  - Competition between interest groups in schools is a major barrier to change.
  - Understanding the actual power structure of the school is the key to designing successful change efforts.
  - The first step in developing a change strategy for schools is to assess the current coalition in order to mobilize positive support and anticipate possible backlash.
  - If an innovation can be made to appeal to the most powerful individuals or groups in the schools, the change will occur.
- Individual incentives perspectives
  - Lack of individual skills and knowledge appropriate to the new innovation is a major barrier to change.
  - Understanding the individual needs and concerns of staff members who may be affected is the key to designing successful change efforts.
  - Resistance to change by individuals is the major reason for failures of most change programs in schools.
  - Effective change in schools requires that individuals internalize the need for change.
- Structural perspectives
  - Poor management and coordination are the most important barriers to effective change in schools.
  - Effective change in schools requires critical evaluation of existing roles and activities.
  - The first step in developing a change strategy for schools is to assess the level of school-wide resources, such as group problem solving skills.
  - If the way in which jobs and responsibilities are defined in a school can be made supportive of a new innovation, then change will occur.

All scales reflecting linker perspectives were standardized to unit variance about a mean of zero.

Total Amount of Training Teachers Received for Implementation

A measure of the use of external resources, the school's value for total amount of training received represents the proportion of teachers at the school who reported receiving 25 or more hours of training in the use of the adopted product or materials prior to implementation plus the proportion of teachers who reported receiving 25 or more hours of training in product use during the first year of implementation. This measure was standardized to unit variance about a mean of zero.

Number of Sources of Training Teachers Received

The number of sources from which teachers reported having received training in product use provides another measure of the use of external resources. These sources included the following: district or school-based specialists; other district or school staff; the developer of the adopted product; the linking agent; other individuals from the operational project; other outside consultants. The school level measure of number of sources of training was computed by taking the average number of training sources reported by teachers within that school. This value was standardized to unit variance about a mean of zero.

Teachers' Assessment of Product Quality

As discussed in the body of this report (See Chapter 4), the characteristics of the adopted products and materials proved to be of great analytic value and produced some of the most policy relevant findings to emerge from this study. A particularly useful scale was a measure of general product quality, developed from items in the teacher questionnaire. Teachers were asked to rate the extent to which the adopted program or materials met four criteria:

- seem directly relevant to the most pressing problem or need in their school;
- meet a need in the classroom;
- provide adequate guidance for implementation; and
- provide new ideas and not just ideas teachers already knew and were using.

These items were rated on a scale ranging from 0 = "not at all" to 4 = "to a very great extent."

The product quality scale was calculated by summing the ratings of these four items for each teacher who responded to the teacher survey. The school level measure of product quality was calculated by taking the arithmetic mean of the teachers scores within the school. This was then standardized to unit variance about a mean of zero.

Difficulty of Product Implementation

A measure of how difficult teachers felt it was to implement the adopted products and materials was developed in the teacher survey by asking respondents to rate the extent (0 = "not at all" to 4 = "to a very great extent") to which the following statements about the adopted product were true:

- requires substantial change from previous teaching style;
- requires change in the way the classroom is organized or managed;
- requires substantial additional record keeping;
- has been difficult to implement the program or materials.

A difficulty of implementation score was calculated for each respondent by summing the ratings on these four items. These were then converted to a school level measure by taking the arithmetic mean of the teachers' scores within the school. Finally, the school level measures were standardized to unit variance about a mean of zero.

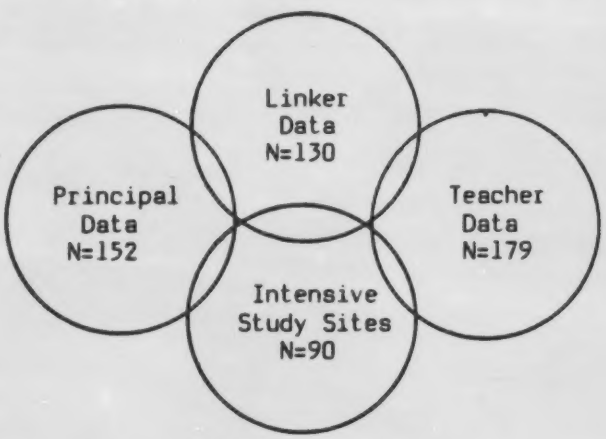
APPENDIX C

Variations in N Due to Multiple Data Sources: Implications for Analysis Procedures

APPENDIX C

In the analysis presented in this report, the number of cases included--i.e., the numbers of cases on which relevant data are available--in any given analytic run vary widely. This is due to the fact that as part of the research design, we proposed to identify a subset of about 91 sites (schools) which we called "intensive study sites." More detailed and extensive data would be collected on these sites, which would later serve as the basis for some of the more critical analyses of program impacts.

There are a total of about 200 sites on which data are available from any of the sources identified in the text: our own visits to sites, case studies, linking agent surveys, the survey or principals, and the survey of teachers. However, N's vary from this figure (200) depending on which variables are included in any given analysis. A total of 152 principals returned useable survey questionnaires. There were 461 useable teacher questionnaires returned (plus another 133 from schools which had not yet adopted a product, so most of the questions were not applicable, representing 179 schools. Note, however, that not all of these schools are represented by data from principals; nor do all 152 schools from which principal surveys were returned have corresponding teacher survey data. Site level data on linker survey variables were provided for 130 sites. Finally, there are the 90 "intensive study" cases. Thus, the total of 200 sites includes cases on which every conceivable combination of data might be available, as shown in the Venn diagram:



Consequently, if our analyses draw on variables from more than one data source, the number of data cases theoretically available is limited to those on which both (or all three) data sets are available, e.g., if we correlate principal variables with teacher variables, the N drops to about 130. Missing data within either or both of these data sets may reduce the number of available cases still further. The shrinkage is even more conspicuous if variables available only from the consolidated coding form--the CCF, or "intensive study sites"--are involvaed since there are only 90 such sites to begin with. In Table C-1 we present average numbers of cases for analyses using various combinations of data sources.

This raises an important question: to what extent are the data cases in analyses which involve shrunken N's representative of the full data base? That is, are the cases in any given analysis biasing our findings?

As we discussed in the project's Revised Study Design (Louis et al, 1978) and in the data analysis plan (Louis et al, 1979), we intended the bulk of the analyses of program impact to be conducted using the "intensive study sample" of 90 cases, since these cases had the most broad coverage in terms of the variables of interest. The full sample would be used to provide important descriptive information and for scaling, but would lack the in-depth data of the intensive study sites. However, it was possible that the subsets of data cases might be biased in terms of site characteristics, program outcomes, or both.

To investigate this possibility, we conducted a series of analyses comparing the several analytic subsets of the data base--i.e., N=90, N=75, etc. A set of twelve "key" variables was identified, including the categorical and distal outcome measures, and five indicators of site characteristics. The intensive analytic data subsets was first compared with the rest of the full data set using the analysis of variance. The results showed that with the exception of being somewhat higher on the two spinoff program effects--impact on schools as organizations, and personal impacts on staff--the intensive study sample did not differ significantly from the rest of the data set.

Table C-1

Average Number of Cases in Key Analyses Using Different Combinations of Data Sources

Data Sources	Representative Analysis	Average N
1. Individual teacher survey data	1. Description of personal impacts, Ch. 4	450
2. Principal survey data	2. Description of extent to which problem solving process incorporated, Ch. 4	150
3. CCF, aggregated teacher survey and principal survey	3. Relationship between problem solving process and school outcomes, Ch. 6	75-90
4. CCF, aggregated teacher survey, and principal survey	4. Relationship between product characteristics and school outcomes, Ch. 5	60
5. CCF, aggregated teacher survey, principal survey, and linker survey	5. Relationship between combined intervention strategies and school outcomes, Ch. 5	75
6. Principal Survey and CCF	6. Relationshp between school characteristics and school outcomes, Ch. 8	43

When the still smaller subsets of the intensive cases--i.e., N=75, N=60, and N=43--were compared with the remaining intensive cases, systematic differences began to emerge. The smaller subsets showed significantly higher means on several variables as summarized in Table C-2.

We also compared the standard deviations on the comparison variables within the data subsets to see if reductions in variance accompanied the higher means, which would make the estimates of relationships presented in the text more conservative. However, for all the comparison variables, the standard deviations were almost identical, sometimes to the second decimal place.

Our conclusions from these analyses are that the intensive study sites are well representative of the full data base. However, the small analytic subsets of the intensive sample are consistently biased toward the high ends of the comparison variables, though no effects on variance were deleated. In terms of the effects these considerations may have had on the regression results presented in the text, we feel that while estimates of intercept terms in the regression models based on smaller N's may have been artificially inflated, these were not the focus of interest. The real assessment of program impact was based on the regression coefficients (the Betas) themselves, and we see no bias for suspecting bias in estimates of these coefficients.

Table C-1

Comparisons of Analytic Data Subsets of Intensive Study Sites

Comparison Variable	Data Subset N=75	N=60	N=43
Categorical Outcome			
Extent Problem Solved		+ (= .002)	+ (= .05)
Organizational Impacts on Schools	+* (= .01)	+ (= .0001)	+ (= .001)
Personal Impacts on Staff			
Incorporation of Program		+ (= .0001)	+ (= .01)
Incorporation of Process		+ (= .001)	
Scope of Implementation	+ (= .001)	+ (= .0001)	+ (= .05)
School Level			
Number of Pupils Enrolled			
Size of Community			+ (= .04)
Level of Teacher Influence in Process			
Teacher Openness to Change			+ (= .05)

*A "+" indicates a significantly higher mean in the subset of cases than in the remaining cases.

APPENDIX D

Instruments: Consolidated Coding Form,
Teacher Survey and Principal Survey*

*Copies of the field guides that were used to direct visits to 42 schools, and surveys of Field agents may be obtained by writing to any of the authors.

A Study of the R&D Utilization Program

CONSOLIDATED CODING FORM

CARD 1

Project: _____ Project ID# ☐ 1

Site: _____ Site ID# ☐☐☐☐☐ 2-6

Linker: _____ Linker ID# ☐☐ 9-10

Coder: _____

Data Sources: ON THE LINE TO THE LEFT OF EACH DOCUMENT, ENTER A "1" IF THE DOCUMENT WAS AVAILABLE AND A "0" IF IT WAS NOT. FOR EACH AVAILABLE DOCUMENT, ENTER THE DATE OF THE DOCUMENT AT THE RIGHT.

___	T; Questionnaire	__/__/__	11,12-17
___	Site visit report (AAI visits)	__/__/__	18,19-24
___	Site rating sheet (AAI visits)	__/__/__	25,26-31
___	Site case study	__/__/__	32,33-38
___	Site rating form for site case study writers	__/__/__	39,40-45
	Management deliverables:		
___	Problem identification	__/__/__	46,47-52
___	Solution selection	__/__/__	53,54-59
___	Planning for implementation	__/__/__	60,61-66
___	Implementation	__/__/__	67,68-73
___	Site demographic form	__/__/__	74,75-80

TABLE OF CONTENTS

	Page		Page
Site Definition	4	Planning for Implementation Process	26
Organizational Characteristics	4	Implementation Process	30
Context and Precedents	6	Internal Strategies and Tactics	35
Nature of the Problem	7	External Strategies and Tactics	36
Problem Identification Process	10	Process Outcomes	38
Characteristics of the Solution	14	Organizational Outcomes and Outcomes for Participating Staff	41
Solution Selection Process	18		
Product Implementation Factors and Outcomes	22		

IMPORTANT

General Instructions for Consolidated Coding Form

1. Please provide a written response to each question, including each of its subparts (a,b,c,...) if any.

   a. For questions requiring you to write a numerical answer (as in Question 2) write "0" if the answer is "none"; write "-1" if the data are missing; write "-2" if the data are conflicting; and write "-3" if the question is not applicable.

   b. If "0" is given as a number code (as in Question 22), please write "0" wherever this response is appropriate. Write "-1" only if there is no information to answer the question, and in that case enter the "-1" response for all parts of the question.

   c. Do not leave any items blank except in accordance with skip instructions.

2. The following codes are standard throughout the form:

   -1 = Missing data (i.e., the information is not provided by the available data sources, or it is unclear, or it is presented in a manner that is incompatible with the response categories)

   -2 = Conflicting data (i.e., the information from different data sources or respondents, or even the same source or respondent, is contradictory)

   -3 = Not applicable

3. Please try to avoid using the "missing data" or "conflicting data" response categories. If you are merely unsure of the correct answer, please respond anyway and use the certainty code (see #4 below) to indicate your uncertainty.

4. For each question (or subpart a,b,c,...) please indicate how certain you are of your response by circling either "1" or "2" in the margin. Please do this even for your "missing data" and "conflicting data" responses--for example, to initiate whether you are reasonably sure or not very sure the data really are missing.

   1 = Reasonably sure

   2 = Not very sure

5. Question 3 asks you to name the one school that was most actively involved in the project at this site. Please use this school as your object of reference throughout the coding form.

6. At several places in the form, you are asked to focus your responses on only one problem, product, or decision-making group, although in fact more than one may have been identified. The problem, product, and group you describe must all be part of the same "story."

   a. Start by selecting the product for which we have the most data.

   b. Then identify the problem it was intended to address. If the product was targeted to more than one problem, choose the problem for which we have the most data.

   c. Next, at each stage of the problem-solving process, select the group whose activities were relevant to the product and/or problem you have chosen. Again, if there is more than one relevant group at a given stage, choose the one for which we have the most data.

7. The following definitions are standard throughout the form:

   a. District: this refers only to the local school district, not the intermediate school district, if one exists.

   b. Superintendent/Asst. Supt.: Superintendent, Assistant Superintendent, Associate Superintendent, Deputy Superintendent--in fact, anyone at the local district level with "Superintendent" in his/her title.

c. Other district-level staff: all district-level staff who do not fit under definition 7b above, including both administrators and specialists. Examples are: Curriculum Director, Curriculum Coordinator, Federal Programs Coordinator, Title I Coordinator, Vocational Education Director, Reading Coordinator or Specialist, etc.

d. Principal/Asst. Principal: Principal, Assistant Principal, Vice Principal--in fact, anyone at the school level with "Principal" in his/her title.

e. Teachers: only teachers with regular classroom teaching responsibilities (and not, for example, a reading specialist who pulls kids out of the classroom for remedial instruction). N.B., a few questions are limited to "teachers involved in RDU." This is always explicitly noted.

f. Other school-level staff: all school-level staff who do not fit under definitions 7d or 7e above. Examples are: Curriculum Director, Curriculum Coordinator, Title I Coordinator, Reading Program Coordinator, Reading Specialist, Librarian, Media Specialist, Teacher Aide, etc.

8. If your response would vary greatly for different members of the same category--for example, the Principal and Vice Principal, or the Superintendent and Assistant Superintendent--choose the response that is appropriate for the individual who was most active in the RDU activities. This general rule does not apply, however, to the Teachers category, in which case you should try to define the majority opinion.

9. For all categories except the Teachers category, if you have information on anyone in the category, choose the response appropriate to that person, even though you may not have information on others in the category. For example, if you know the Assistant Principal was very pleased with the adopted product, but you do not know what the Principal felt, code the Assistant Principal's opinion.

I. SITE DEFINITION

1. What is the locus of intervention at this site--i.e., to what level are the project's services primarily delivered? (CIRCLE ONE)

CARD 2

Entire school district, all public schools are involved	01	1 2	9-10,11
Entire school district, but not all public schools are involved	02		
One school	03		
Other (please specify):_____	04		
Missing data	-1		
Conflicting data	-2		

2. How many schools of each type are involved in the project at this site?

(ENTER A NUMBER ON EACH LINE)

a. Primary or elementary schools	___	1 2	12-13,14
b. Middle schools	___	1 2	15-16,17
c. Junior high schools	___	1 2	18-19,20
d. Senior high schools	___	1 2	21-22,23
e. Other (please describe):_____	___	1 2	24-25,26

3. Please name the <u>one</u> school that is <u>most</u> actively involved in the project at this site (and use it as your object of reference throughout the rest of this form). If more than one school was <u>equally</u> involved, choose the school on which there is the most data.

_____

II. ORGANIZATIONAL CHARACTERISTICS

4. Which of the following best describes this school? (CIRCLE ONE)

Primary or elementary school	01	1 2	27-28,29
Middle school	02		
Junior high school	03		
Senior high school	04		
Other (please describe):_____	05		
Missing data	-1		
Conflicting data	-2		

5. How would you describe the community in which the school is located?

(CIRCLE ONE)

Rural area	01	1 2	30-31,32
Small city or town (pop. under 50,000) not near a large city	02		
Medium-sized city or town (pop. 50,000 to 250,000)	03		
Suburb near a large city	04		
Large city (pop. over 250,000)	05		
Missing data	-1		
Conflicting data	-2		

6. To what extent have the following characteristics of the school or its community changed significantly over the past five years?

(CIRCLE ONE RESPONSE ON EACH LINE)

	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data		CARD 2 (cont.)
a. Racial distribution of school's pupils	01	02	03	04	-1	-2	1 2	33-34,35
b. Socio-economic status of school's pupils	01	02	03	04	-1	-2	1 2	36-37,38
c. Size of community	01	02	03	04	-1	-2	1 2	39-40,41
d. Economic base of community	01	02	03	04	-1	-2	1 2	42-43,44

7. How would you describe the socio-economic status of the school's current pupils?

(CIRCLE ONE)

High	01	1 2	45-46,47
Medium	02		
Low	03		
Mixed (more High than Low)	04		
Mixed (more Low than High)	05		
Missing data	-1		
Conflicting data	-2		

8. How many schools of each type are there in the district in which this school is located?

(ENTER A NUMBER ON EACH LINE)

a. Primary or elementary schools	___	1 2	48-49,50
b. Middle schools	___	1 2	51-52,53
c. Junior high schools	___	1 2	54-55,56
d. Senior high schools	___	1 2	57-58,59
e. Other (please describe): _____	___	1 2	60-61,62

9. How many full-time teaching positions are assigned to this school, out of how many in the district as a whole? (ENTER A NUMBER ON EACH LINE)

a. Full-time teaching positions assigned to the school	_____	1 2	63-65,66
b. Full-time teaching positions in the district	_____	1 2	67-71,72

10. How many pupils are currently enrolled in this school and in the district as a whole?

CARD 3

(ENTER A NUMBER ON EACH LINE)

a. Pupils enrolled in the school	_____	1 2	9-12,13
b. Pupils enrolled in the district	_____	1 2	14-19,20

11. How many professional staff are there at the district level? (Include the superintendent, but do not include secretarial or clerical staff or school-level personnel who also have district-level responsibilities, such as a principal who serves as district curriculum coordinator.)

(ENTER A NUMBER)

District level professional staff	_____	1 2	21-23,24

CARD 3 (cont.)

12. Counting the superintendent as one level (the top), how many levels of professional staff are there in the district-level organization? (Do not count secretarial or clerical staff or school-level personnel who also have district-level responsibilities.)

(CIRCLE ONE)

One	01	1 2	25-26,27
Two	02		
Three	03		
Four or more	04		
Missing data	-1		
Conflicting data	-2		

13. Does the school have more than one administrator--e.g., in addition to the principal does it also have an assistant principal or curriculum director?

Yes	01	1 2	28-29,30
No	00		
Missing data	-1		
Conflicting data	-2		

14. What is the current total annual operating budget for the district--i.e., the "bottom line" of the budget? (ENTER THE NUMBER OF DOLLARS ROUNDED TO THE NEAREST WHOLE THOUSAND.)

$_____ thousand dollars 1 2 31-36,37

III. CONTEXT AND PRECEDENTS

15. How would you describe this school's image in the community at the time it entered the RDU project?

(CIRCLE ONE)

Its image was mostly favorable	01	1 2	38-39,40
Its image was mostly unfavorable	02		
Its image was mixed, or it didn't really have one	03		
Missing data	-1		
Conflicting data	-2		

16. How would you describe the innovativeness of this school prior to the RDU project?

(CIRCLE ONE)

The school had done everything the same way for years	01	1 2	41-42,43
The school had tried new programs or ideas moderately often	02		
The school had tried new programs or ideas quite frequently	03		
Missing data	-1		
Conflicting data	-2		

17. This school was part of which wave of sites entering the RDU project?

(CIRCLE ONE)

First (or only) wave	01	1 2	44-45,46
Second or third wave	02		
Missing data	-1		
Conflicting data	-2		

18. In your opinion, to what extent was each stage of the RDU problem-solving process essentially accomplished prior to the school's entry into the RDU project? (NOTE: We are concerned here with progress toward decisions (or implementation), not relative levels of activity before and after entry into RDU.)

(CIRCLE ONE RESPONSE ON EACH LINE)

	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data		CARD 3 (cont.)
a. Problem identification	01	02	03	04	-1	-2	1 2	47-48,49
b. Solution selection	01	02	03	04	-1	-2	1 2	50-51,52
c. Planning for implementation	01	02	03	04	-1	-2	1 2	53-54,55
d. Implementation	01	02	03	04	-1	-2	1 2	56-57,58

19. In your opinion, what kind of precedents were there at this school for each aspect of the RDU experience listed below? (CIRCLE ONE RESPONSE ON EACH LINE)

	No precedent	Precedent with unknown effect	Favorable precedent	Unfavorable precedent	Missing data	Conflicting data		
a. Involvement in a federally or state funded school improvement program other than Title I	01	02	03	04	-1	-2	1 2	59-60,61
b. Assistance from a linker or other in-person consultant	01	02	03	04	-1	-2	1 2	62-63,64
c. Association with the person who was named linker	01	02	03	04	-1	-2	1 2	65-66,67
d. Going outside the district for information or assistance	01	02	03	04	-1	-2	1 2	68-69,70
e. Forming a local problem-solving team	01	02	03	04	-1	-2	1 2	71-72,73
f. Adopting an innovation	01	02	03	04	-1	-2	1 2	74-75,76

IV. NATURE OF THE PROBLEM

20. Has this school completed its problem identification? (CIRCLE ONE)

Yes. . . . . 02 — 1 2 — 77-78,79

No, they are still in the process of identifying the problem. 01

No, and they are not currently engaged in problem identification. 00

SKIP TO QUESTION 29

21. Was more than one problem identified through the initial problem identification process? (CIRCLE ONE)

CARD 4

Yes. . . . . 01 — 1 2 — 9-10,11

No. 00

Missing data. . . . . -1

Conflicting data. . . . . -2

IMPORTANT: Your answers to the remaining questions on the nature of the problem should describe only one problem. This should be the problem addressed by the product you describe in Section VI (see General Instructions). If the product addresses more than one problem, choose the problem on which there is the most data.

22. What is the content area of the problem?

(ON EACH LINE, ENTER A "1" IF THE CONTENT AREA IS INCLUDED IN THE PROBLEM DEFINITION AND A "0" IF IT IS NOT.)

CARD 4 (cont.)

a. Reading/language arts	___	1 2	12-13,14
b. Mathematics	___	1 2	15-16,17
c. Career education	___	1 2	18-19,20
d. Other specific instructional area(s).	___	1 2	21-22,23

23. What characteristics of the school's pupils or programs are included in the problem definition?

(ON EACH LINE, ENTER A "1" IF THE CHARACTERISTIC IS INCLUDED IN THE PROBLEM DEFINITION AND A "0" IF IT IS NOT. ENTER "-1" ONLY IF THERE IS NO INFORMATION RELEVANT TO THIS QUESTION. IN THAT CASE, ENTER "-1" ON ALL LINES a-bb.)

Pupil Characteristics

a. Performance in class	___	1 2	24-25,26
b. Performance on standardized tests	___	1 2	27-28,29
c. Skills/knowledge	___	1 2	30-31,32
d. Motivation	___	1 2	33-34,35
e. Other pupil attitudes	___	1 2	36-37,38
f. Behavior/discipline	___	1 2	39-40,41
Other pupil characteristics (specify):			
g. _____	___	1 2	42-43,44
h. _____	___	1 2	45-46,47

Program Characteristics

i. Curriculum	___	1 2	48-49,50
j. Materials	___	1 2	51-52,53
k. Teacher skills/knowledge	___	1 2	54-55,56
l. Teaching strategies/methodologies	___	1 2	57-58,59
m. Teacher motivation/morale	___	1 2	60-61,62
n. Other teacher attitudes	___	1 2	63-64,65
o. Other staffing characteristics (e.g., numbers and types of staff). . . .	___	1 2	66-67,68
p. Testing/assessment	___	1 2	69-70,71
q. Record keeping	___	1 2	72-73,74
r. Classroom organization/management	___	1 2	75-76,77
s. School organization/management	___	1 2	78-79,80

CARD 5

t. Guidance services	___	1 2	9-10,11
u. Staff/administration relations	___	1 2	12-13,14
v. Staff/staff relations	___	1 2	15-16,17
w. School/central district office relations	___	1 2	18-19,20
x. School/community relations	___	1 2	21-22,23
y. Space or facilities (school-level)	___	1 2	24-25,26
z. Time (school-level).	___	1 2	27-28,29
Other program characteristics (specify):			
aa. _____	___	1 2	30-31,32
bb. _____	___	1 2	33-34,35

24. Scope of the Problem: According to school personnel, what proportion of the school's pupils and staff are affected by the problem?

(CIRCLE ONE RESPONSE ON EACH LINE)

	None	Few (less than 20%)	Some (20-49%)	A large proportion (50-79%)	All or most (80% or more)	Missing data	Conflicting data		CARD 5 (cont.)
a. Pupils	01	02	03	04	05	-1	-2	1 2	36-37,38
b. Teaching staff	01	02	03	04	05	-1	-2	1 2	39-40,41

HINT: Questions 25 and 26 have bi-variate response categories, whereas we previously regarded them as five-point scales. As a rule of thumb, answer "yes" to Question 25 and "more important" to Question 26, only if you would have given the variable a 4 or 5 on the five-point scale.

25. Severity: According to school personnel, is the problem severe? (NOTE: "Severity" is independent of "scope." In other words, few of the total population may be affected, though the problem for those individuals is very severe.) (CIRCLE ONE)

Yes	01	1 2	42-43,44
No	00		
Missing data	-1		
Conflicting data	-2		

26. Centrality: According to school personnel, how important is the problem relative to other school problems? (CIRCLE ONE)

Less important	01	1 2	45-46,47
More important	02		
Missing data	-1		
Conflicting data	-2		

27. How extensive were other efforts to solve the problem during the two years prior to RDU? (NOTE: Title I programs count, but only if they are mentioned specifically as efforts to solve the problem.) (CIRCLE ONE)

No previous effort had been made to solve the problem	01	1 2	48-49,50
Some previous effort had been made (e.g., calling in a consultant, trying a new program)	02		
Substantial previous effort had been made (e.g., involvement in several programs)	03		
Missing data	-1		
Conflicting data	-2		

28. How extensive were other efforts to solve the problem during RDU? (NOTE: Title I programs count, but only if they are mentioned specifically as efforts to solve the problem.) (CIRCLE ONE)

No other effort was being made to solve the problem	01	1 2	51-52,53
Some other effort was being made (e.g., calling in a consultant, trying a new program)	02		
Substantial other effort was being made (e.g., involvement in several programs)	03		
Missing data	-1		
Conflicting data	-2		

V. PROBLEM IDENTIFICATION PROCESS

IMPORTANT: It may be possible to answer some of the questions in this section even if the problem identification process has not been completed. Skip this section only if the problem identification process has not yet begun.

29. In your opinion, to what extent were any members of the listed role groups actively involved in the problem identification process--i.e., to what extent did they participate in discussions, making decisions, or carrying out tasks related to the process?

(CIRCLE ONE RESPONSE ON EACH LINE)

WARNING: This scale is different from rating form.	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data	Not Applicable *		CARD 5 (cont.)
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1 2	54-55,56
b. Other district-level staff	01	02	03	04	-1	-2	-3	1 2	57-58,59
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1 2	60-61,62
d. Teachers	01	02	03	04	-1	-2	-3	1 2	63-64,65
e. Other school-level staff	01	02	03	04	-1	-2	-3	1 2	66-67,68

30. In your opinion, how much influence did any members of the listed role groups have over the major decisions in the problem identification process? Use these definitions as guidelines for responding.

None or very little: Had little or no input into decisions, and little or no influence.

Some: May have had considerable input into decisions, but was not a strong influence.

A great deal: Strongly influenced the decisions; may have made the final decisions alone.

(CIRCLE ONE RESPONSE ON EACH LINE)

	None or very little	Some	A great deal	Missing data	Conflicting data	Not applicable		CARD 6
a. Superintendent/Asst. Supt.	01	02	03	-1	-2	-3	1 2	9-10,11
b. Other district-level staff	01	02	03	-1	-2	-3	1 2	12-13,14
c. Principal/Asst. Principal	01	02	03	-1	-2	-3	1 2	15-16,17
d. Teachers	01	02	03	-1	-2	-3	1 2	18-19,20
e. Other school-level staff	01	02	03	-1	-2	-3	1 2	21-22,23

* Throughout this section, answer "not applicable" if: (1) there were no members of a particular role group at the site--for example, no school-level staff other than the principal and teachers; or (2) it is too early in the process to answer the question.

31. In your opinion, what was the prevailing attitude among all members of the listed role groups towards the local project during the problem identification process? Use these criteria as guidelines for responding.

Active opposition: Takes steps to undermine or terminate project. Withholds assistance when requested, and may even divert project resources to other activities. Promotes criticism or opposition to project by others. If attends meetings, expresses strong reservations about project as a whole.

Passive opposition: Shows unfavorable or skeptical attitude toward project. Does not protect project from critics. Gives assistance grudgingly. If attends meetings, expresses mildly negative attitude.

Passive support: Expresses favorable attitude toward project, but does not take steps to assist or coordinate. May protect project from detractors, but does not go beyond passive defense. Promises assistance but rarely or never delivers. If attends meetings, does not participate in discussion.

Active support: Encourages project members to do a good job and shows own commitment. Actively responds to requests for assistance or resources. Defends project before critics and helps to coordinate with other projects or personnel. If attends meetings, participates in discussion and may even lead discussion.

(CIRCLE ONE RESPONSE ON EACH LINE)

	Active opposition	Passive opposition	Passive support	Active support	Missing data	Conflicting data	Not Applicable		CARD 6 (cont.)
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1 2	24-25,26
b. Other district-level staff	01	02	03	04	-1	-2	-3	1 2	27-28,29
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1 2	30-31,32
d. Teachers	01	02	03	04	-1	-2	-3	1 2	33-34,35
e. Other school-level staff	01	02	03	04	-1	-2	-3	1 2	36-37,38

32. In your opinion, to what extent was the faculty as a whole actively involved in the problem identification process--i.e., to what extent did the faculty as a whole participate in discussions, making decisions, or carrying out tasks related to the process? (CIRCLE ONE)

To little or no extent	01	1 2	39-40,41
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

33. In your opinion, how much influence did the faculty as a whole have over the major decisions in the problem identification process? (CIRCLE ONE)

IMPORTANT: Use the same guidelines as for Question 30.

None or very little	01	1 2	42-43,44
Some	02		
A great deal	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

34. During the problem identification stage, was there a formally constituted group--other than the faculty as a whole--specifically empowered to make decisions or carry out tasks related to problem identification? (CIRCLE ONE)

IMPORTANT: The group should meet the following criteria:

- It must have a label (although this may be informal).
- It must include at least two district or school staff.
- It must include at least one "potential implementor."

CARD 6 (cont.)

Yes	01	1 2	45-46,47
No	00		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

SKIP TO QUESTION 39

35. In your opinion, to what extent was this group actively involved in the problem identification process--i.e., to what extent did its members, acting as a group, participate in discussions, making decisions, or carrying out tasks related to the process? (CIRCLE ONE)

To little or no extent	01	1 2	48-49,50
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

36. In your opinion, how much influence did this group have over the major decisions in the problem identification process? (CIRCLE ONE)

IMPORTANT: Use the same guidelines as for Question 30.

None or very little	01	1 2	51-52,53
Some	02		
A great deal	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

37. On what level was this group organized and focussed during the problem identification stage? (CIRCLE ONE)

This school alone	01	1 2	54-55,56
Several schools	02		
The district as a whole	03		
Another level	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

CARD 6 (cont.)

38. Was the principal or other school administrator a member of this group during the problem identification stage? (NOTE: Answer "yes" if he/she was at least nominally a member, even if he/she was not very active.) (CIRCLE ONE)

Yes	01	1 2	57-58,59
No	00		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

39. In your opinion, to what extent were the school's problem identification activities congruent with sound problem-solving practices? Use the criteria listed in Part 1 of the memorandum on an "ideal" problem-solving model. (CIRCLE ONE)

To little or no extent	01	1 2	60-61,62
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

Please write the letter (from the memorandum on an "ideal" problem-solving model) corresponding to each criterion you feel was not adequately met by the school's problem identification activities.

_____

40. In your opinion, to what extent were the school's problem identification activities congruent with sound group decision-making practices? Use the criteria listed in Part 2 of the memorandum on an "ideal" problem-solving model. (CIRCLE ONE)

To little or no extent	01	1 2	63-64,65
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

Please write the letter (from the memorandum on an "ideal" problem-solving model) corresponding to each criterion you feel was not adequately met by the school's problem identification activities.

_____

41. What is your assessment of the level of effort devoted to the school's problem identification activities by local school or district personnel? Use these criteria as guidelines for responding, but make a rough estimate if necessary.

Low: less than 10 person-days
Medium: 10 to 30 person-days
High: over 30 person-days

(CIRCLE ONE)

CARD 6 (cont.)

Low	01	1 2	66-67,68
Medium	02		
High	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

VI. CHARACTERISTICS OF THE SOLUTION

42. Has the school completed its solution selection? (CIRCLE ONE)

Yes	02	1 2	69-70,71
No, they are still in the process of selecting a solution	01		
No, and they are not currently engaged in solution selection.	00		

SKIP TO QUE 57

IMPORTANT: Questions 43-46 are intended to capture the full breadth of all solutions planned through RDU to address the school's identified problems (including all problems the school initially defined). These solutions may have included adopting one or more externally developed products (with perhaps some inservice training or local developmental efforts tied to product implementation) but also may have included inservice training or local developmental efforts that were not specifically related to product implementation.

43. How many externally developed products did the school select as part of the solutions planned through RDU?

(ENTER A NUMBER)

___ Products → IF NONE, SKIP TO QUESTION 45		1 2	72-73,74

44. Of these products, how many were in the project's original knowledge base (and not just added after the school proposed to adopt them)? (NOTE: Answer "not applicable" if there was no knowledge base when the products were selected.)

(ENTER A NUMBER)

___ Products originally in the knowledge base		1 2	75-76,77

45. Did the planned solutions include any inservice training that was not specifically related to product implementation? (NOTE: Training in group process, problem-solving, or decision making does not apply to this question, which is focused on solutions to the identified problems). (CIRCLE ONE)

Yes	01	1 2	78-79,80
No	00		
Missing data	-1		
Conflicting data	-2		

CARD 7

46. Did the planned solutions include any local development of materials, curricula, programs, etc. that was not specifically related to product implementation? (NOTE: Do not depend on Question VI-15 in the CSW Survey for your answer to this question.) (CIRCLE ONE)

Yes	01	1 2 9-10,11
No	00	
Missing data	-1	
Conflicting data	-2	

IMPORTANT: Your answers to the remaining questions on characteristics of the solution should describe only one externally developed product. Choose the product on which we have the most data. If no externally developed product was selected, skip to Question 57.

47. Was this product in the project's original knowledge base (and not just added after the school proposed to adopt it)? (NOTE: Answer "not applicable" if there was no knowledge base when the product was selected.) (CIRCLE ONE)

Yes	01	1 2 12-13,14
No	00	
Missing data	-1	
Conflicting data	-2	
Not applicable	-3	

48. At the time the product was selected, had empirical data on its effectiveness been collected through field testing? (NOTE: Assume the answer is "yes" if the product had been validated and "no" if it had not.)

Yes	01	1 2 15-16,17
No	00	
Missing data	-1	
Conflicting data	-2	

49. Which of the following best describes the origins of this product? (NOTE: If the product is being marketed commercially but you know it was developed in one of the other settings, choose the response which fits the setting in which it was developed.) (CIRCLE ONE)

Educational research and development	01	1 2 18-19,20
Practitioner development/demonstration	02	
Commercial marketing and development	03	
Missing data	-1	
Conflicting data	-2	

50. What characteristics of the school's educational program would be directly affected by implementation of this product? (NOTE: This item refers only to the direct effects of product implementation--not indirect effects or consequences.)

(ON EACH LINE, ENTER A "1" IF THE CHARACTERISTIC WOULD BE AFFECTED AND A "0" IF IT WOULD NOT. ENTER "-1" ONLY IF THERE IS NO INFORMATION RELEVANT TO THIS QUESTION. IN THAT CASE, ENTER "-1" ON ALL LINES a-n.)

CARD 7 (cont.)

a. Curriculum	___	1 2	21-22,23
b. Materials	___	1 2	24-25,26
c. Teaching strategies/methodologies	___	1 2	27-28,29
d. Staffing (i.e., numbers and types of staff)	___	1 2	30-31,32
e. Testing/assessment	___	1 2	33-34,35
f. Record keeping	___	1 2	36-37,38
g. Classroom organization/management	___	1 2	39-40,41
h. School organization/management	___	1 2	42-43,44
i. Guidance services	___	1 2	45-46,47
j. Communication structures/systems	___	1 2	48-49,50
k. Use or availability of space or facilities	___	1 2	51-52,53
l. Use or availability of time	___	1 2	54-55,56
Other (please specify):			
m. _____	___	1 2	57-58,59
n. _____	___	1 2	60-61,62

51. In your opinion, what is the degree of merit or relative advantage of this product over existing practices? (CIRCLE ONE)

WARNING: This scale is different from rating form.

No advantage	01	1 2	63-64,65
Very little advantage	02		
Some advantage	03		
A great advantage	04		
A very great advantage	05		
Missing data	-1		
Conflicting data	-2		

52. In your opinion, did this product--prior to any major modifications--match the problem it was intended to address--as this problem was originally defined? (CIRCLE ONE)

Yes	01	1 2	66-67,68
No	00		
Missing data	-1		
Conflicting data	-2		

53. Is the product designed to affect pupils directly (and not merely to change administrative procedures, for example)? (CIRCLE ONE)

Yes	01	1 2	69-70,71
No	00		
Missing data	-1		
Conflicting data	-2		

CARD 7 (cont.)

54. Does the product consist of parts, or modules, that could be used separately? (CIRCLE ONE)

Yes	01	1 2 72-73,74
No	00	
Missing data	-1	
Conflicting data	-2	

55. In your opinion, is the product complex? (NOTE: "Complexity" refers to the number of things that must be changed/addressed/coordinated in order to implement the product.) (CIRCLE ONE)

Yes	01	1 2 75-76,77
No	00	
Missing data	-1	
Conflicting data	-2	

56. In your opinion, how easy would it be to reverse implementation of this product--i.e., how easily could the school return to its prior state if the product is not permanently adopted? (NOTE: The more that implementation of a product involves substantial irreversible changes, such as staff firings or new facilities, the greater the difficulty of returning to a prior state.) (CIRCLE ONE)

WARNING: This scale is different from rating form.

Very difficult to reverse	01	1 2 78-79,80
Difficult to reverse	02	
Easy to reverse	03	
Very easy to reverse	04	
Missing data	-1	
Conflicting data	-2	

VII. SOLUTION SELECTION PROCESS

IMPORTANT: It may be possible to answer some of the questions in this section even if the solution selection process has not been completed. Skip this section only if the solution selection process has not yet begun.

57. In your opinion, to what extent were any members of the listed role groups actively involved in the solution selection process--i.e., to what extent did they participate in discussions, making decisions, or carrying out tasks related to the process?

(CIRCLE ONE RESPONSE ON EACH LINE)

WARNING: This scale is different from rating form.

	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data	Not Applicable *		CARD 8
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1 2	9-10,11
b. Other district-level staff	01	02	03	04	-1	-2	-3	1 2	12-13,14
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1 2	15-16,17
d. Teachers	01	02	03	04	-1	-2	-3	1 2	18-19,20
e. Other school-level staff	01	02	03	04	-1	-2	-3	1 2	21-22,23

58. In your opinion, how much influence did any members of the listed role groups have over the major decisions in the solution selection process? (NOTE: An individual or group may have had a strong influence even if products were screened prior to their involvement, provided they were presented with a reasonable number of alternatives.) Use these definitions as guidelines for responding.

None or very little: Had little or no input into decisions, and little or no influence.

Some: May have had considerable input into decisions, but was not a strong influence.

A great deal: Strongly influenced the decisions; may have made the final decisions alone.

(CIRCLE ONE RESPONSE ON EACH LINE)

	None or very little	Some	A great deal	Missing data	Conflicting data	Not applicable		
a. Superintendent/Asst. Supt.	01	02	03	-1	-2	-3	1 2	24-25,26
b. Other district-level staff	01	02	03	-1	-2	-3	1 2	27-28,29
c. Principal/Asst. Principal	01	02	03	-1	-2	-3	1 2	30-31,32
d. Teachers	01	02	03	-1	-2	-3	1 2	33-34,35
e. Other school-level staff	01	02	03	-1	-2	-3	1 2	36-37,38

* Throughout this section, answer "not applicable" if: (1) there were no members of a particular role group at the site; or (2) it is too early in the process to answer the question.

59. In your opinion, what was the prevailing attitude among all members of the listed role groups towards the local project during the solution selection process? Use these criteria as guidelines for responding.

Active opposition: Takes steps to undermine or terminate project. Withholds assistance when requested, and may even divert project resources to other activities. Promotes criticism or opposition to project by others. If attends meetings, expresses strong reservations about project as a whole.

Passive opposition: Shows unfavorable or skeptical attitude toward project. Does not protect project from critics. Gives assistance grudgingly. If attends meetings, expresses mildly negative attitude.

Passive support: Expresses favorable attitude toward project, but does not take steps to assist or coordinate. May protect project from detractors, but does not go beyond passive defense. Promises assistance but rarely or never delivers. If attends meetings, does not participate in discussion.

Active support: Encourages project members to do a good job and shows own commitment. Actively responds to requests for assistance or resources. Defends project before critics and helps to coordinate with other projects or personnel. If attends meetings, participates in discussion and may even lead discussion.

(CIRCLE ONE RESPONSE ON EACH LINE)

	Active opposition	Passive opposition	Passive support	Active support	Missing data	Conflicting data	Not applicable		CARD 8 (cont.)
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1 2	39-40,41
b. Other district-level staff	01	02	03	04	-1	-2	-3	1 2	42-43,44
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1 2	45-46,47
d. Teachers	01	02	03	04	-1	-2	-3	1 2	48-49,50
e. Other school-level staff	01	02	03	04	-1	-2	-3	1 2	51-52,53

60. In your opinion, to what extent was the faculty as a whole actively involved in the solution selection process--i.e., to what extent did the faculty as a whole participate in discussions, making decisions, or carrying out tasks related to the process? (CIRCLE ONE)

To little or no extent	01	1 2	54-55,56
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

61. In your opinion, how much influence did the faculty as a whole have over the major decisions in the solution selection process? (CIRCLE ONE)

IMPORTANT: Use the same guidelines as for Question 58.

None or very little	01	1 2	57-58,59
Some	02		
A great deal	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

62. During the solution selection stage, was there a formally constituted group--other than the faculty as a whole--specifically empowered to make decisions or carry out tasks related to solution selection? (CIRCLE ONE)

IMPORTANT: The group should meet the following criteria:

- It must have a label (although this may be informal).
- It must include at least two district or school staff.
- It must include at least one "potential implementor."

CARD 8 (cont.)

Yes	01	1 2	60-61,62
No	00		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

SKIP TO QUESTION 68

63. How many members of the group you described in Section V were also members of this group?

None	01	1 2	63-64,65
Few (less than 20%)	02		
Some (20-49%)	03		
A large proportion (50-79%)	04		
All or most (over 80%)	05		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

64. In your opinion, to what extent was this group actively involved in the solution selection process--i.e., to what extent did its members, acting as a group, participate in discussions, making decisions, or carrying out tasks related to the process? (CIRCLE ONE)

To little or no extent	01	1 2	66-67,68
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

65. In your opinion, how much influence did this group have over the major decisions in the solution selection process? (CIRCLE ONE)

IMPORTANT: Use the same guidelines as for Question 58.

None or very little	01	1 2	69-70,71
Some	02		
A great deal	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

CARD 8 (cont.)

66. On what level was this group organized and focused during the solution selection stage? (CIRCLE ONE)

This school alone	01	1 2 72-73,74
Several schools	02	
The district as a whole	03	
Another level	04	
Missing data	-1	
Conflicting data	-2	
Not applicable	-3	

67. Was the principal or other school administrator a member of this group during the solution selection stage? (NOTE: Answer "yes" if he/she was at least nominally a member, even if he/she was not very active.) (CIRCLE ONE)

Yes	01	1 2 75-76,77
No	00	
Missing data	-1	
Conflicting data	-2	
Not applicable	-3	

68. In your opinion, to what extent were the school's solution selection activities congruent with sound problem-solving practices? Use the criteria listed in Part 1 of the memorandum on an "ideal" problem-solving model. (CIRCLE ONE)

To little or no extent	01	1 2 78-79,80
To some extent	02	
To a great extent	03	
To a very great extent	04	
Missing data	-1	
Conflicting data	-2	
Not applicable	-3	

Please write the letter (from the memorandum on an "ideal" problem-solving model) corresponding to each criterion you feel was not adequately met by the school's solution selection activities.

_____

CARD 9

69. In your opinion, to what extent were the school's solution selection activities congruent with sound group decision-making practices? Use the criteria listed in Part 2 of the memorandum on an "ideal" problem-solving model. (CIRCLE ONE)

To little or no extent	01	1 2 9-10,11
To some extent	02	
To a great extent	03	
To a very great extent	04	
Missing data	-1	
Conflicting data	-2	
Not applicable	-3	

Please write the letter (from the memorandum on an "ideal" problem-solving model) corresponding to each criterion you feel was not adequately met by the school's solution selection activities.

_____

70. What is your assessment of the level of effort devoted to the school's solution selection activities by local school or district personnel? Use these criteria as guidelines for responding, but make a rough estimate if necessary.

Low: less than 10 person-days
Medium: 10 to 30 persons-days
High: over 30 person-days

(CIRCLE ONE)

Low	01	1 2	12-13,14
Medium	02		
High	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

CARD 9 (cont.)

VIII. PRODUCT IMPLEMENTATION FACTORS AND OUTCOMES

IMPORTANT: Your answers to these questions on product implementation factors and outcomes should continue to focus on the one product referred to in Questions 47-56 above. If no externally developed product was selected, skip to Question 114.

71. Is the product currently being used at the school--i.e., as of the time of the most recently available information, was it being used? (CIRCLE ONE)

Yes	03	1 2	15-16,17
No, they are still planning for implementation	02		
No, plans to use the product were abandoned before implementation	01 → SKIP TO QUESTION 86		
No, use of the product was discontinued after implementation	00 → SKIP TO QUESTION 77		

72. What proportion of the pupils and staff affected by the problem are directly involved in use of the product?

(CIRCLE ONE RESPONSE ON EACH LINE)

	None	Few (less than 20%)	Some (20-49%)	A large proportion (50-79%)	All or most (80% or more)	Missing data	Conflicting data		
a. Pupils	01	02	03	04	05	-1	-2	1 2	18-19,20
b. Teaching staff	01	02	03	04	05	-1	-2	1 2	21-22,23

73. How often is the product used? (CIRCLE ONE)

One time only (e.g., an inservice program)	01	1 2	24-25,26
Less than once a month, but on a continuing basis	02		
At least once a month	03		
At least once a week	04		
Daily or all the time	05		
Missing data	-1		
Conflicting data	-2		

CARD 9 (cont.)

74. On the days the product is used, what <u>percent of the day</u> is affected for <u>pupils</u> who are directly involved? (CIRCLE ONE)

Less than 20%	01	1 2	27-28,29
20-49%	02		
50-79%	03		
80% or more	04		
Missing data	-1		
Conflicting data	-2		
Not applicable, pupils are not directly involved → SKIP TO QUESTION 76	-3		

75. Approximately how many hours (plus additional minutes) in a typical week are affected by the use of the product, for <u>pupils</u> who are directly involved?

(ENTER NUMBERS)

____ hours ____ minutes

1 2 | 30-31, 32-33,34

76. Is the product being used in more than one school in the district as a result of RDU? (NOTE: A "yes" answer does not necessarily imply that other schools were implementing the product under the RDU aegis; it may instead indicate natural diffusion, or spread.) (CIRCLE ONE)

Yes	01	1 2	35-36,37
No	00		
Missing data	-1		
Conflicting data	-2		
Not applicable, the product is not used <u>within</u> schools	-3		

77. In <u>your</u> opinion, to what extent was the developer's original design of the product modified <u>before</u> and <u>after</u> implementation? (NOTE: A product may be modified by adding to, deleting, changing, or elaborating upon the original product objectives and philosophy, performance requirements (e.g., materials, content, sequencing, intended treatment groups, pupil placement, length of exposure, teaching techniques, etc.), management characteristics (e.g., administrative support, school or classroom organization, staffing or leadership requirements, etc.), or training requirements.)

(CIRCLE ONE RESPONSE ON EACH LINE)

	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data		
a. Before implementation	01	02	03	04	-1	-2	1 2	38-39,40
b. After implementation	01	02	03	04	-1	-2	1 2	41-42,43

If the product was modified to little or no extent . . .

. . . BEFORE IMPLEMENTATION → SKIP QUESTION 78

. . . AFTER IMPLEMENTATION → SKIP QUESTION 79

78. What were the reasons for the modifications that were made before implementation?

(ON EACH LINE, ENTER A "1" IF THE REASON APPLIES AND A "0" IF IT DOES NOT. ENTER "-1" ONLY IF THERE IS NO INFORMATION RELEVANT TO THIS QUESTION. IN THAT CASE, ENTER "-1" ON ALL LINES a-c.)

CARD 9 (cont.)

a. To accommodate the product to existing conditions (e.g., curriculum, materials, approaches, philosophy, staffing, organization, space or facilities, budgets, etc.) . . . . . ___	1 2	44-45,46
b. To improve the effectiveness of the product in the local context (given pupil or staff characteristics, for example) . . . . . ___	1 2	47-48,49
c. To improve the inherent effectiveness of the product . . . . . ___	1 2	50-51,52

79. What were the reasons for the modifications that were made after implementation?

(ON EACH LINE, ENTER A "1" IF THE REASON APPLIES AND A "0" IF IT DOES NOT. ENTER "-1" ONLY IF THERE IS NO INFORMATION RELEVANT TO THIS QUESTION. IN THAT CASE, ENTER "-1" ON ALL LINES a-c.)

a. To accommodate the product to existing conditions (e.g., curriculum, materials, approaches, philosophy, staffing, organization, space or facilities, budgets, etc.) . . . . . ___	1 2	53-54,55
b. To improve the effectiveness of the product in the local context (given pupil or staff characteristics, for example) . . . . . ___	1 2	56-57,58
c. To improve the inherent effectiveness of the product . . . . . ___	1 2	59-60,61

80. According to school personnel, to what extent was adequate guidance for implementing the product provided by the developers, either in writing or through training and technical assistance? (CIRCLE ONE)

To little or no extent 01	1 2	62-63,64
To some extent 02		
To a great extent 03		
To a very great extent 04		
Missing data . . . . . -1		
Conflicting data . . . . . -2		

81. According to school personnel, to what extent was the product difficult to implement? (CIRCLE ONE)

To little or no extent 01	1 2	65-66,67
To some extent 02		
To a great extent 03		
To a very great extent 04		
Missing data . . . . . -1		
Conflicting data . . . . . -2		

82. In your opinion, what are the prevailing current attitudes of the following groups toward the product that was chosen?

(CIRCLE ONE RESPONSE ON EACH LINE)

	Very negative	Somewhat negative	Neutral	Somewhat positive	Very positive	Missing data	Conflicting data	Not applicable		CARD 10
a. Superintendent/Asst. Supt.	01	02	03	04	05	-1	-2	-3	1 2	9-10,11
b. Other district-level staff	01	02	03	04	05	-1	-2	-3	1 2	12-13,14
c. Principal/Asst. Principal	01	02	03	04	05	-1	-2	-3	1 2	15-16,17
d. Teachers involved in RDU	01	02	03	04	05	-1	-2	-3	1 2	18-19,20
e. Unidentified	01	02	03	04	05	-1	-2	-3	1 2	21-22,23

83. Have formal plans for evaluation and feedback on this product been drawn up? (NOTE: A formal plan should specify at least the following: who will be responsible, what success criteria will be used, and how data will be gathered. It should also be a little more formal than saying teachers will react verbally, for example.) (CIRCLE ONE)

Yes	01	1 2	24-25,26
No	00		
Missing data	-1		
Conflicting data	-2		

SKIP TO QUESTION 85

84. To what extent have the formal plans for evaluation and feedback been implemented?

Not at all	01	1 2	27-28,29
Some, but not all, parts appropriate to this point in time have been implemented	02		
All parts appropriate to this point in time have been implemented	03		
Missing data	-1		
Conflicting data	-2		

85. Over the next few years, which of the following possibilities do you think is most likely to happen with respect to the use of the product among teachers at this school? (CIRCLE ONE)

The product will be dropped, or has already been dropped	01	1 2	30-31,32
Some or all of the teachers will use the product, but not extensively	02		
Some or all of the teachers will use the product, and it generally will be used quite extensively	03		
Missing data	-1		
Conflicting data	-2		

IX. PLANNING FOR IMPLEMENTATION PROCESS

IMPORTANT: It may be possible to answer some of the questions in this section even if the planning for implementation process has not been completed. Skip this section only if the planning for implementation process has not yet begun.

86. In your opinion, to what extent were any members of the listed role groups actively involved in the planning for implementation process--i.e., to what extent did they participate in discussions, making decisions, or carrying out tasks related to the process?

(CIRCLE ONE RESPONSE ON EACH LINE)

WARNING: This scale is different from rating form.

	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data	Not applicable *		CARD 10 (cont.)
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1 2	33-34,35
b. Other district-level staff	01	02	03	04	-1	-2	-3	1 2	36-37,38
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1 2	39-40,41
d. Teachers	01	02	03	04	-1	-2	-3	1 2	42-43,44
e. Other school-level staff	01	02	03	04	-1	-	-3	1 2	45-46,47

87. In your opinion, how much influence did any members of the listed role groups have over the major decisions in the planning for implementation process? Use these definitions as guidelines for responding.

None or very little: Had little or no input into decisions, and little or no influence.

Some: May have had considerable input into decisions, but was not a strong influence.

A great deal: Strongly influenced the decisions; may have made the final decisions alone.

(CIRCLE ONE RESPONSE ON EACH LINE)

	None or very little	Some	A great deal	Missing data	Conflicting data	Not applicable		
a. Superintendent/Asst. Supt.	01	02	03	-1	-2	-3	1 2	48-49,50
b. Other district-level staff	01	02	03	-1	-2	-3	1 2	51-52,53
c. Principal/Asst. Principal	01	02	03	-1	-2	-3	1 2	54-55,56
d. Teachers	01	02	03	-1	-2	-3	1 2	57-58,59
e. Other school-level staff	01	02	03	-1	-2	-3	1 2	60-61,62

* Throughout this section, answer "not applicable" if: (1) there were no members of a particular role group at this site; or (2) it is too early in the process to answer the question.

88. In your opinion, what was the prevailing attitude among all members of the listed role groups towards the local project during the planning for implementation process? Use these criteria as guidelines for responding.

Active opposition: Takes steps to undermine or terminate project. Withholds assistance when requested, and may even divert project resources to other activities. Promotes criticism or opposition to project by others. If attends meetings, expresses strong reservations about project as a whole.

Passive opposition: Shows unfavorable or skeptical attitude toward project. Does not protect project from critics. Gives assistance grudgingly. If attends meetings, expresses mildly negative attitude.

Passive support: Expresses favorable attitude toward project, but does not take steps to assist or coordinate. May protect project from detractors, but does not go beyond passive defense. Promises assistance but rarely or never delivers. If attends meetings, does not participate in discussion.

Active support: Encourages project members to do a good job and shows own commitment. Actively responds to requests for assistance or resources. Defends project before critics and helps to coordinate with other projects or personnel. If attends meetings, participates in discussion and may even lead discussion.

(CIRCLE ONE RESPONSE ON EACH LINE)

	Active opposition	Passive opposition	Passive support	Active support	Missing data	Conflicting data	Not applicable			CARD 10 (cont.)
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1	2	63-64,65
b. Other district-level staff	01	02	03	04	-1	-2	-3	1	2	66-67,68
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1	2	69-70,71
d. Teachers	01	02	03	04	-1	-2	-3	1	2	72-73,74
e. Other school-level staff	01	02	03	04	-1	-2	-3	1	2	75-76,77

89. In your opinion, to what extent was the faculty as a whole actively involved in the planning for implementation process--i.e., to what extent did the faculty as a whole participate in discussions, making decisions, or carrying out tasks related to the process? (CIRCLE ONE)

To little or no extent	01	1	2	78-79,80
To some extent	02			
To a great extant	03			
To a very great extent	04			
Missing data	-1			
Conflicting data	-2			
Not applicable	-3			

90. In your opinion, how much influence did the faculty as a whole have over the major decisions in the planning for implementation process? (CIRCLE ONE)

CARD 11

IMPORTANT: Use the same guidelines as for Question 87.

None or very little	01	1	2	9-10,11
Some	02			
A great deal	03			
Missing data	-1			
Conflicting data	-2			
Not applicable	-3			

91. During the planning for implementation stage, was there a formally constituted group--other than the faculty as a whole--specifically empowered to make decisions or carry out tasks related to planning for implementation? (CIRCLE ONE)

IMPORTANT: The group should meet the following criteria:

- It must have a label (although this may be informal).
- It must include at least two district or school staff.
- It must include at least one "potential implementor."

CARD 11 (cont.)

Yes	01	1 2	12-13,14
No	00		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

SKIP TO QUESTION 97

92. How many members of the group you described in Section VII were also members of this group? (CIRCLE ONE)

None	01	1 2	15-16,17
Few (less than 20%)	02		
Some (20-49%)	03		
A large proportion (50-79%)	04		
All or most (over 80%)	05		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

93. In your opinion, to what extent was this group actively involved in the planning for implementation process--i.e., to what extent did its members, acting as a group, participate in discussions, making decisions, or carrying out tasks related to the process? (CIRCLE ONE)

To little or no extent	01	1 2	18-19,20
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

94. In your opinion, how much influence did this group have over the major decisions in the planning for implementation process? (CIRCLE ONE)

IMPORTANT: Use the same guidelines as for Question 87.

None or very little	01	1 2	21-22,23
Some	02		
A great deal	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

CARD 11 (cont.)

95. On what level was this group organized and focused during the planning for implementation stage? (CIRCLE ONE)

This school alone	01	1 2 24-25,26
Several schools	02	
The district as a whole	03	
Another level	04	
Missing data	-1	
Conflicting data	-2	
Not applicable	-3	

96. Was the principal or other school administrator a member of this group during the planning for implementation stage? (NOTE: Answer "yes" if he/she was at least nominally a member, even if he/she was not very active.) (CIRCLE ONE)

Yes	01	1 2 27-28,29
No	00	
Missing data	-1	
Conflicting data	-2	
Not applicable	-3	

97. In your opinion, to what extent were the school's planning for implementation activities congruent with sound problem-solving practices? Use the criteria listed in Part 1 of the memorandum on an "ideal" problem-solving model. (CIRCLE ONE)

To little or no extent	01	1 2 30-31,32
To some extent	02	
To a great extent	03	
To a very great extent	04	
Missing data	-1	
Conflicting data	-2	
Not applicable	-3	

Please write the letter (from the memorandum on an "ideal" problem-solving model) corresponding to each criterion you feel was not adequately met by the school's planning for implementation activities.

_____

98. In your opinion, to what extent were the school's planning for implementation activities congruent with sound group decision-making practices? Use the criteria listed in Part 2 of the memorandum on an "ideal" problem-solving model. (CIRCLE ONE)

To little or no extent	01	1 2 33-34,35
To some extent	02	
To a great extent	03	
To a very great extent	04	
Missing data	-1	
Conflicting data	-2	
Not applicable	-3	

Please write the letter (from the memorandum on an "ideal" problem-solving model) corresponding to each criterion you feel was not adequately met by the school's planning for implementation activities.

_____

99. What is your assessment of the level of effort devoted to the school's planning for implementation activities by local school or district personnel? Use these criteria as guidelines for responding, but make a rough estimate if necessary.

Low: Less than 10 person-days
Medium: 10 to 30 person-days
High: over 30 person-days

(CIRCLE ONE)

Low	01	1 2	36-37,38
Medium	02		
High	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

CARD 11 (cont.)

X. IMPLEMENTATION PROCESS

IMPORTANT: If the product has not yet been implemented, skip to Question 114.

IMPORTANT: The types of activities to consider as part of the "implementation process" are monitoring, evaluation, administration, coordination, and group discussion--not actual use or implementation of the product.

100. In your opinion, to what extent were any members of the listed role groups actively involved in the implementation process--i.e., to what extent did they participate in discussions, making decisions, or carrying out tasks related to the process?

(CIRCLE ONE RESPONSE ON EACH LINE)

WARNING: This scale is different from rating form.

	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data	Not applicable *		
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1 2	39-40,41
b. Other district-level staff	01	02	03	04	-1	-2	-3	1 2	42-43,44
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1 2	45-46,47
d. Teachers	01	02	03	04	-1	-2	-3	1 2	48-49,50
e. Other school-level staff	01	02	03	04	-1	-2	-3	1 2	51-52,53

* Throughout this section, answer "not applicable" if: (1) there were no members of a particular role group at this site; or (2) it is too early in the process to answer the question.

101. In your opinion, how much influence did any members of the listed role groups have over the major decisions in the implementation process? Use these definitions as guidelines for responding.

None or very little: Had little or no input into decisions, and little or no influence.

Some: May have had considerable input into decisions, but was not a strong influence.

A great deal: Strongly influenced the decisions; may have made the final decisions alone.

(CIRCLE ONE RESPONSE ON EACH LINE)

	None or very little	Some	A great deal	Missing data	Conflicting data	Not applicable		CARD 11 (cont.)
a. Superintendent/Asst. Supt.	01	02	03	-1	-2	-3	1 2	54-55.56
b. Other district-level staff	01	02	03	-1	-2	-3	1 2	57-58,59
c. Principal/Asst. Principal	01	02	03	-1	-2	-3	1 2	60-61,62
d. Teachers	01	02	03	-1	-2	-3	1 2	63-64,65
e. Other school-level staff	01	02	03	-1	-2	-3	1 2	66-67,68

102. In your opinion, what was the prevailing attitude among all members of the listed role groups towards the local project during the implementation process? Use these criteria as guidelines for responding.

Active opposition: Takes steps to undermine or terminate project. Withholds assistance when requested, and may even divert project resources to other activities. Promotes criticism or opposition to project by others. If attends meetings, expresses strong reservations about project as a whole.

Passive opposition: Shows unfavorable or skeptical attitude toward project. Does not protect project from critics. Gives assistance grudgingly. If attends meetings, expresses mildly negative attitude.

Passive support: Expresses favorable attitude toward project, but does not take steps to assist or coordinate. May protect project from detractors, but does not go beyond passive defense. Promises assistance but rarely or never delivers. If attends meetings, does not participate in discussion.

Active support: Encourages project members to do a good job and shows own commitment. Actively responds to requests for assistance or resources. Defends project before critics and helps to coordinate with other projects or personnel. If attends meetings, participates in discussion and may even lead discussion.

(CIRCLE ONE RESPONSE ON EACH LINE)

	Active opposition	Passive opposition	Passive support	Active support	Missing data	Conflicting data	Not applicable		CARD 12
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1 2	9-10,11
b. Other district-level staff	01	02	03	04	-1	-2	-3	1 2	12-13,14
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1 2	15-16,17
d. Teachers	01	02	03	04	-1	-2	-3	1 2	18-19,20
e. Other school-level staff	01	02	03	04	-1	-2	-3	1 2	21-22,23

CARD 12 (cont.)

103. In your opinion, to what extent was the faculty as a whole actively involved in the implementation process--i.e., to what extent did the faculty as a whole participate in discussions, making decisions, or carrying out tasks related to the process? (CIRCLE ONE)

To little or no extent	01	1 2	24-25,26
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

104. In your opinion, how much influence did the faculty as a whole have over the major decisions in the implementation process? (CIRCLE ONE)

None or very little	01	1 2	27-28,29
Some	02		
A great deal	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

105. During the implementation stage, was there a formally constituted group--other than the faculty as a whole--specifically empowered to make decisions or carry out tasks related to implementation? (CIRCLE ONE)

IMPORTANT: The group should meet the following criteria:

- It must have a label (although this may be informal).
- It must include at least two district or school staff.
- It must include at least one "potential implementor."

Yes	01	1 2	30-31,32
No	00		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

SKIP TO QUESTION 111

106. How many members of the group you described in Section IX were also members of this group? (CIRCLE ONE)

None	01	1 2	33-34,35
Few (less than 20%)	02		
Some (20-49%)	03		
A large proportion (50-79%)	04		
All or most (over 80%)	05		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

CARD 12 (cont.)

107. In your opinion, to what extent was this group actively involved in the implementation process--i.e., to what extent did its members, acting as a group, participate in discussions, making decisions, or carrying out tasks related to the process? (CIRCLE ONE)

To little or no extent	01	1 2	36-37,38
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

108. In your opinion, how much influence did this group have over the major decisions in the implementation process? (CIRCLE ONE)

IMPORTANT: Use the same guidelines as for Question 101.

None or very little	01	1 2	39-40,41
Some	02		
A great deal	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

109. On what level was this group organized and focussed during the implementation stage? (CIRCLE ONE)

This school alone	01	1 2	42-43,44
Several schools	02		
The district as a whole	03		
Another level	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

110. Was the principal or other school administrator a member of this group during the implementation stage? (NOTE: Answer "yes" if he/she was at least nominally a member, even if he/she was not very active.) (CIRCLE ONE)

Yes	01	1 2	45-46,47
No	00		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

CARD 12 (cont.)

111. In your opinion, to what extent were the school's implementation activities congruent with sound problem-solving practices? Use the criteria listed in Part 1 of the memorandum on an "ideal" problem-solving model. (CIRCLE ONE)

To little or no extent	01	1 2	48-49,50
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

Please write the letter (from the memorandum on an "ideal" problem-solving model) corresponding to each criterion you feel was not adequately met by the school's implementation activities.

_____

112. In your opinion, to what extent were the school's implementation activities congruent with sound group decision-making practices? Use the criteria listed in Part 2 of the memorandum on an "ideal" problem-solving model. (CIRCLE ONE)

To little or no extent	01	1 2	51-52,53
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

Please write the letter (from the memorandum on an "ideal" problem-solving model) corresponding to each criterion you feel was not adequately met by the school's implementation activities.

_____

113. What is your assessment of the level of effort devoted to the school's implementation activities by local school or district personnel? Use these criteria as guidelines for responding, but make a rough estimate if necessary.

Low: less than 10 person-days

Medium: 10 to 30 person-days

High: over 30 person-days

(CIRCLE ONE)

Low	01	1 2	54-55,56
Medium	02		
High	03		
Missing data	-1		
Conflicting data	-2		
Not applicable	-3		

XI. INTERNAL STRATEGIES AND TACTICS

CARD 12 (cont.)

114. Were any school staff provided training in group process, problem-solving, or decision-making skills and techniques? (CIRCLE ONE)

Yes	01	1 2 57-58,59
No	00	
Missing data	-1	
Conflicting data	-2	

115. In your opinion, was there at least one individual, at the school or district level, who was a strong and effective "internal change agent" for this school--i.e., was there anyone who sort of took charge, kept things moving, resolved minor problems, and was able to whip up motivation amoung the staff? (CIRCLE ONE)

Yes	01	1 2 60-61,62
No	00	
Missing data	-1	
Conflicting data	-2	

SKIP TO QUESTION 117

116. What type of individual served as the "internal change agent" for this school? (NOTE: There may have been more than one, but probably no more than three.)

(ENTER A "1" IF AN INDIVIDUAL FROM THE CATEGORY SERVED AS AN "INTERNAL CHANGE AGENT" AND A "0" IF NOT. ENTER "-1" ONLY IF THERE IS NO INFORMATION RELEVANT TO THIS QUESTION. IN THAT CASE, ENTER "-1" ON ALL LINES a-f.)

a. Superintendent/Asst. Supt.	___	1 2 63-64,65
b. Other district-level staff	___	1 2 66-67,68
c. Principal/Asst. Principal	___	1 2 69-70,71
d. Teacher	___	1 2 72-73,74
e. Other school-level staff	___	1 2 75-76,77
f. Other (please specify):_____	___	1 2 78-79,80

117. In your opinion, was there any group which served as a strong and effective "internal change agent team" for this school--i.e., was there any group which, as a unit, sort of took charge, kept things moving, resolved minor problems, and was able to whip up motivation amoung the staff? (NOTE: This group may have existed in addition to or instead of individual "internal change agents.") (CIRCLE ONE)

CARD 13

Yes	01	1 2 9-10,11
No	00	
Missing data	-1	
Conflicting data	-2	

SKIP TO QUESTION 119

118. Was this group formally established or empowered to make decisions or carry out tasks related to the RDU project? (CIRCLE ONE)

Yes	01	1 2 12-13,14
No	00	
Missing data	-1	
Conflicting data	-2	

XII. EXTERNAL STRATEGIES AND TACTICS

IMPORTANT: If there has been any turnover in linking agents, answer these questions as if they were the same individual. However, if the linking agents behaved very differently on a particular item, answer it only for the linker whose tenure overlapped with the school's participation the longest.

IMPORTANT: Each and every site in the RDU program had a linker assigned to it. Just because a linker had no contact with the site (this happens in a few cases) is no reason to mark these questions "not applicable."

119. In your opinion, to what extent has the linking agent performed the following services or functions for this school?

(CIRCLE ONE RESPONSE ON EACH LINE)

WARNING. This scale is different from rating form.	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data			CARD 13 (cont.)
a. Observing/documenting activities	01	02	03	04	-1	-2	1	2	15-16,17
b. Orienting school staff to the RDU project	01	02	03	04	-1	-2	1	2	18-19,20
c. Providing (not arranging for) training in problem solving or group process	01	02	03	04	-1	-2	1	2	21-22,23
d. Providing (not arranging for) training in a curricular area	01	02	03	04	-1	-2	1	2	24-25,26
e. Facilitating the group process--e.g., by resolving conflicts, guiding discussions, helping to set goals	01	02	03	04	-1	-2	1	2	27-28,29
f. Coordinating/lining up resources (human or material)	01	02	03	04	-1	-2	1	2	30-31,32
g. Providing expert counsel/technical assistance related to:									
- Diagnosing the problem	01	02	03	04	-1	-2	1	2	33-34,35
- Assessing the match between innovations and problems	01	02	03	04	-1	-2	1	2	36-37,38
- Implementing an innovation	01	02	03	04	-1	-2	1	2	39-40,41
- Evaluating solution implementation or effectiveness	01	02	03	04	-1	-2	1	2	42-43,44
h. Providing assistance such as interviewing, helping with proposals, etc.	01	02	03	04	-1	-2	1	2	45-46,47
i. Serving as a communications link/liaison between school and project	01	02	03	04	-1	-2	1	2	48-49,50

IMPORTANT: For Questions 120-122, answer "not applicable" if the particular stage had not been reached. Also answer "not applicable" for Question 121, if there were no meetings.

120. How frequent were the ROU-related face-to-face contacts between the linking agent and the school during each stage of the problem-solving process?

(CIRCLE ONE RESPONSE ON EACH LINE)

	Less than once per month	At least once per month	Once per week	Two or three times per week	More than three times per week	Missing data	Conflicting data	Not applicable		CARD 13 (cont.)
a. Problem identification	01	02	03	04	05	-1	-2	-3	1 2	51-52,53
b. Solution selection	01	02	03	04	05	-1	-2	-3	1 2	54-55,56
c. Planning for implementation	01	02	03	04	05	-1	-2	-3	1 2	57-58,59
d. Implementation	01	02	03	04	05	-1	-2	-3	1 2	60-61,62

121. What proportion of the meetings of the decision-making group were attended by the linking agent during each stage?

(CIRCLE ONE RESPONSE ON EACH LINE)

	None	Few (less than 20%)	Some (20-40%)	A large proportion (50-79%)	All or most (80% or more)	Missing data	Conflicting data	Not applicable		
a. Problem identification	01	02	03	04	05	-1	-2	-3	1 2	63-64,65
b. Solution selection	01	02	03	04	05	-1	-2	-3	1 2	66-67,68
c. Planning for implementation	01	02	03	04	05	-1	-2	-3	1 2	69-70,71
d. Implementation	01	02	03	04	05	-1	-2	-3	1 2	72-73,74

122. In general, how much influence do you feel the linking agent had over decisions made by the school during each stage? Use these definitions as guidelines for responding.

None or very little: Had little or no input into decisions, and little or no influence.

Some: May have had considerable input into decisions, but was not a strong influence.

A great deal: Strongly influenced the decisions; may have made the final decisions alone.

(CIRCLE ONE RESPONSE ON EACH LINE)

	None or very little	Some	A great deal	Missing data	Conflicting data	Not applicable		CARD 14
a. Problem identification	01	02	03	-1	-2	-3	1 2	9-10,11
b. Solution selection	01	02	03	-1	-2	-3	1 2	12-13,14
c. Planning for implementation	01	02	03	-1	-2	-3	1 2	15-16,17
d. Implementation	01	02	03	-1	-2	-3	1 2	18-19,20

123. In your opinion, which of the following responses best describes the role the linker assumed in his/her dealings with this school? (CIRCLE ONE)

Nondirective responder: The linker reacted to the initiative of the site, letting the system draw upon him/her at its own speed. 01

Indirect structurer: The linker was active behind the scenes, structuring the situation to increase the likelihood of success, but getting the school group to assume responsibility for the project. In public, the linker was usually a nonparticipant observer or passive participant. 02

Direct intervenor: The linker was heavily involved in the local efforts and assumed direct leadership of the process. He/she usually initiated activities, chaired meetings, and followed up on details, while the site responded in a more passive way. 03

Missing data . . . . . -1

Conflicting data . . . . . -2

1 2 21-22,23

124. In your opinion, which of the following responses best describes the linker's relationship with the individual who played the role of "internal change agent" for this school? (See Question 116 above.) (CIRCLE ONE)

CARD 14 (cont.)

The linker and the internal change agent had little contact with one another	01	1 2	24-25,26
The linker and the internal change agent had a conflicting or competitive relationship; their roles were not complementary.	02		
The linker supported the work of the internal change agent; the internal change agent took a more active coordinating role than the linker	03		
The internal change agent supported the work of the linker; the internal change agent took a less active coordinating role than the linker	04		
The linker and the internal change agent worked closely as a team; they were equally active in coordinating the project in this school.	05		
Missing data	-1		
Conflicting data	-2		
Not applicable, there was no one who played the role of "internal change agent" for this school.	-3		

XIII. PROCESS OUTCOMES

125. According to school personnel, how important was the linking agent in helping th[illegible]hool to accomplish its problem-solving activities? (CIRCLE ONE)

WARNING: This scale is different from rating form.

Not at all or not very important	01	1 2	27-28,29
Somewhat important	02		
Important	03		
Very important	04		
Missing data	-1		
Conflicting data	-2		

126. Overall, how satisfied were members of the listed role groups with the assistance, services, or support provided by the linking agent?

(CIRCLE ONE RESPONSE ON EACH LINE)

	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data	Not applicable*		
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1 2	30-31,32
b. Other district-level staff	01	02	03	04	-1	-2	-3	1 2	33-34,35
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1 2	36-37,38
d. Teachers involved in RDU	01	02	03	04	-1	-2	-3	1 2	39-40,41
e. Unidentified	01	02	03	04	-1	-2	-3	1 2	42-43,44

*For Questions 126-128, answer "not applicable" if the individual(s) had so little knowledge of the linker, knowledge base, or process that no opinion was possible. Also answer "not applicable" if there were no members of the role group at this site.

127. Overall, how satisfied were members of the listed role groups with the assistance, services, or support provided by the knowledge base?

(CIRCLE ONE RESPONSE ON EACH LINE)

	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data	Not applicable		CARD 14 (cont.)
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1 2	45-46,47
b. Other district-level staff	01	02	03	04	-1	-2	-3	1 2	48-49,50
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1 2	51-52,53
d. Teachers involved in RDU	01	02	03	04	-1	-2	-3	1 2	54-55,56
e. Unidentified	01	02	03	04	-1	-2	-3	1 2	57-58,59

128. Overall, how satisfied are members of the listed role groups with the process they went through--i.e., the steps that were taken and how decisions were made?

(CIRCLE ONE RESPONSE ON EACH LINE)

	To little or no extent	To some extent	To a great extent	To a very great extent	Missing data	Conflicting data	Not applicable		
a. Superintendent/Asst. Supt.	01	02	03	04	-1	-2	-3	1 2	60-61,62
b. Other district-level staff	01	02	03	04	-1	-2	-3	1 2	63-64,65
c. Principal/Asst. Principal	01	02	03	04	-1	-2	-3	1 2	66-67,68
d. Teachers involved in RDU	01	02	03	04	-1	-2	-3	1 2	69-70,71
e. Unidentified	01	02	03	04	-1	-2	-3	1 2	72-73,74

129. In your opinion, how different was this process from the school's previous attempts to solve problems or to adopt new programs or materials? (CIRCLE ONE)

To little or no extent	01	1 2	75-76,77
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		

130. Looking at the five statements below, choose the one statement that best describes the extent to which this school has subsequently used the same process to deal with other school problems. (CIRCLE ONE)

They are repeating (or have repeated) this process to solve at least one other problem in the school	01	1 2	78-79,80
They are adopting (or have adopted) some parts of the process to solve another problem in the school	02		
They have not used the process to solve another problem, but they are planning definitely to use it in the future	03		
They have not used the process to solve another problem, but they probably will in the future	04		
It is unclear whether they have used the process again or whether there are plans to use it in the future	05		
Missing data	-1		
Conflicting data	-2		

131. Overall, what are the current attitudes of the listed role groups toward the school's participation in the RDU project?

(CIRCLE ONE RESPONSE ON EACH LINE)

	Very negative	Somewhat negative	Neutral	Somewhat positive	Very positive	Missing data	Conflicting data	Not applicable*		CARD 15
a. Superintendent/Asst. Supt.	01	02	03	04	05	-1	-2	-3	1 2	9-10,11
b. Other district-level staff	01	02	03	04	05	-1	-2	-3	1 2	12-13,14
c. Principal/Asst. Principal	01	02	03	04	05	-1	-2	-3	1 2	15-16,17
d. Teachers involved in RDU	01	02	03	04	05	-1	-2	-3	1 2	18-19,20
e. Teachers in general	01	02	03	04	05	-1	-2	-3	1 2	21-22,23
f. Unidentified	01	02	03	04	05	-1	-2	-3	1 2	24-25,26

132. In your opinion, to what extent did the teachers who were involved in RDU at the school regard this effort as a special "project"--i.e., something out of the ordinary? (CIRCLE ONE)

To little or no extent	01	1 2	27-28,29
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		

133. In your opinion, to what extent did the teachers who were involved in RDU at the school understand that this effort was part of a larger program at the state or national level? (CIRCLE ONE)

To little or no extent	01	1 2	30-31,32
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		

134. In your opinion, to what extent did the teachers who were involved in RDU at the school understand what they were expected to do and why? (CIRCLE ONE)

To little or no extent	01	1 2	33-34,35
To some extent	02		
To a great extent	03		
To a very great extent	04		
Missing data	-1		
Conflicting data	-2		

* Answer "not applicable" if the individual(s) had so little knowledge of the project that no opinion was possible. Also answer "not applicable" if there were no members of the role group at this site.

XIV. ORGANIZATIONAL OUTCOMES AND OUTCOMES FOR PARTICIPATING STAFF

135. What is <u>your</u> assessment of the ways in which the following characteristics of the school have changed as a result of the school's involvement in the RDU project?

(CIRCLE ONE RESPONSE ON EACH LINE)

	Very much worse	Somewhat worse	No change at all	Somewhat better	Very much better	Missing data	Conflicting data			CARD 15 (cont.)
a. Staff knowledge of problem-solving practices	01	02	03	04	05	-1	-2	1	2	36-37,38
b. Staff awareness and acceptance of R&D products	01	02	03	04	05	-1	-2	1	2	39-40,41
c. Pupil performance and behavior	01	02	03	04	05	-1	-2	1	2	42-43,44
d. Teacher morale	01	02	03	04	05	-1	-2	1	2	45-46,47
e. Frequency of interstaff communication	01	02	03	04	05	-1	-2	1	2	48-49,50
f. Curriculum and/or materials	01	02	03	04	05	-1	-2	1	2	51-52,53
g. Teaching methodologies	01	02	03	04	05	-1	-2	1	2	54-55,56
h. Organizational structure	01	02	03	04	05	-1	-2	1	2	57-58,59
i. Teacher participation in decision-making	01	02	03	04	05	-1	-2	1	2	60-61,62
j. School's image in the district	01	02	03	04	05	-1	-2	1	2	63-64,65
k. Severity or scope of the problem	01	02	03	04	05	-1	-2	1	2	66-67,68
l. Use of specialists	01	02	03	04	05	-1	-2	1	2	69-70,71
m. Community or parent involvement	01	02	03	04	05	-1	-2	1	2	72-73,74
n. Classroom organization or management	01	02	03	04	05	-1	-2	1	2	75-76,77
o. Other (specify): _____	01	02	03	04	05	-1	-2	1	2	78-79,80

FEDAC NO: S 47
Expiration Date: Aug. 30, 1980

LINKING R&D WITH SCHOOLS

A Study of the R&D Utilization Program
Teacher Questionnaire
Fall 1979

Dear Educator:

Your school has recently been part of a nation-wide program sponsored by the National Institute of Education. The program is called the Research and Development Utilization (RDU) program, although you may know it as the Florida Linkage System (FLS). An important part of this program was to help teachers and administrators clarify and solve local problems more effectively. A major feature of the program in most schools was the involvement of a local planning team or steering committee composed of teachers and administrators. This team frequently worked with an outside linking agent* to identify a particular problem in basic skills and then to select and implement one or more research-based programs or materials** to solve it.

One goal of the National Institute of Education in supporting the program was to learn more about the local school improvement process and the role that externally developed materials can play in making it more effective. To this end, Abt Associates Inc., a private social research firm, was awarded a contract to conduct a study of the RDU program.

A major source of information for our study is a survey of principals and a sample of teachers at each school which has participated in the program. We are asking you to complete a questionnaire this one time, providing information which will contribute to a better understanding of the needs and successes of schools as they attempt to solve locally defined problems. It will take approximately 30 minutes to complete this questionnaire, which you may then return directly to us in the enclosed postage paid envelope. The information on the inside cover of the questionnaire provides further details on the procedures we use to protect the confidentiality of all data we collect.

We would like to thank you in advance for your cooperation in helping us to learn about the RDU program in your school.

Sincerely,

Karen Seashore Louis, Ph.D.
Project Director

*According to our records, the linking agent who worked with your school was

_____

**Our records indicate that your school adopted the following research-based program or materials

_____

Abt Associates Inc., an applied social research firm, has been employed by the National Institute of Education to conduct a Study of the R&D Utilization Program. The information that you provide will contribute to a better understanding of how the problem solving process works in schools and the role that externally developed programs and materials can play.

Please be assured that your participation in this study is entirely voluntary. Although we urge you to complete the questionnaire in the interests of the study, your participation or non-participation will in no way affect your standing or your employment in the school. No member of the school district will have access to your responses at any time. To protect your anonymity your name does not appear on the questionnaire. The number on the lower right-hand corner of the cover is used to record the receipt of your questionnaire. No information about any individual respondent will be identified by her/his name or be identifiable in any reports published by Abt Associates.

All reports we compile will combine your answers with those of other professional personnel so as to respect your privacy and the confidentiality of the data you have given us. You may, of course, omit any questions which you consider to be objectionable. Your answers to all questions will be placed on a computer tape without your name, along with answers of other respondents.

Data being collected under authority of Section 405(b) (2) of the General Education Provisions Act, as amended, 20 USC 1221e(b) (2).

School Setting

1. **Please indicate the type of school in which you are employed. (Please check one.)**

Primary/elementary school ..... ____
Middle school ..... ____
Junior high school ..... ____
Senior high school ..... ____
If some other kind of school, please describe _____ ... ____
Not employed in a school ..... ____

2. **What is your position? (Please check one.)**

Classroom teacher ..... ____
School administrator ..... ____
School level specialist (Please describe) _____ ... ____
Other (Please describe) _____ ... ____

3. **If you are a classroom teacher, what grades are you teaching this year? (Circle *all* the grades you currently teach.)**

PK K 1 2 3 4 5 6 7 8 9 10 11 12

R&D Based Materials or Programs

4. **Has your school or district selected an R&D based program or materials as a result of participation in the Florida Linkage System (FLS)? (Please check one.)**

Yes ..... ____
No, we are still in the process of identifying the problem ..... ____
No, we have identified the problem but have not yet finished searching for the best solution ..... ____
No, we have searched for a solution but the programs or materials we have looked at don't seem to meet our needs ..... ____
Don't know ..... ____

→ If No or Don't Know, skip to Q. 13

5. **Did *you personally* participate in the decision to adopt the R&D based program or materials your school is using? (Please check one.)**

Yes ..... ____
No ..... ____

6. Thinking back to the form or content of the R&D based program or materials, to what extent were any *modifications* required to use the program and materials in your school? (For example, were different materials or approaches substituted or added?) (Circle one on the scale below.)

NOT AT ALL	TO A LITTLE EXTENT	TO SOME EXTENT	TO A GREAT EXTENT	TO A VERY GREAT EXTENT	DON'T KNOW/ CAN'T RECALL
0	1	2	3	4	?

IF NOT AT ALL OR DON'T KNOW/CAN'T RECALL, SKIP TO Q.8

7. To what extent did the following groups or individuals participate in decisions concerning modifications of the R&D based program or materials in your school? (Circle one on each line.)

	NOT AT ALL	TO A LITTLE EXTENT	TO SOME EXTENT	TO A GREAT EXTENT	TO A VERY GREAT EXTENT	DON'T KNOW/ CAN'T RECALL
a. You, yourself	0	1	2	3	4	?
b. Other teachers	0	1	2	3	4	?
c. The principal	0	1	2	3	4	?
d. A school or district specialist	0	1	2	3	4	?
e. The developer(s) of the R&D based programs or materials that your school adopted	0	1	2	3	4	?
f. The linking agent	0	1	2	3	4	?
g. Other individuals associated with FLS	0	1	2	3	4	?
h. Other experts from outside your district	0	1	2	3	4	?

8. Do *you personally* use any of the selected R&D based programs or materials? (Check one response.)

No, I have never used it and do not expect to use it in the future ..... ____

No, but I have used it in the past ..... ____

No, but I will use it in the future ..... ____

Yes ..... ____

(Please name the program(s) you are using)_____

_____

If YES: Please answer the following questions. If you use more than one program or set of materials, answer for the one you use the most.

A. *If YES,* approximately what month and year did you first begin to use the program or materials?

Month _____ Year 19 _____

B. *If YES,* with approximately *what percent* of your students do you use the program or materials?

_____ %

Check here if not applicable because the program is not used directly with students ..... ☐

C. *If YES,* on the average, how many *days per week* do you use the program or materials?

Days _____

Check here if not applicable because program is not used on a regular basis ..... ☐

D. *If YES,* on the days when you use the program or materials, approximately how many *minutes per day* do you use it? (Please respond in minutes.)

Minutes _____

9. Do you plan to continue using the selected R&D based program or materials in the future? (Check one.)

Yes, with little or no modification ..... _____
Yes, but with some modifications ..... _____
Yes, but with major modifications ..... _____
No, I will not use it beyond this year ..... _____
Not applicable, the program or materials are designed to be used only once ..... _____

10. Please give us *your opinion* on the following characteristics of the R&D based program or materials by circling the most appropriate response. (Circle one on each line.)

To what extent do the selected program or materials . . .	NOT AT ALL	TO A LITTLE EXTENT	TO SOME EXTENT	TO A GREAT EXTENT	TO A VERY GREAT EXTENT	NOT APPLIC-ABLE	DON'T KNOW/ CAN'T RECALL
a. Seem directly relevant to the most pressing problem or need in your school?	0	1	2	3	4	N/A	?
b. Meet a need in your classroom?	0	1	2	3	4	N/A	?
c. Provide adequate guidance for implementation?	0	1	2	3	4	N/A	?
d. Provide "new" ideas and not just ideas you already knew or were using?	0	1	2	3	4	N/A	?

	NOT AT ALL	TO A LITTLE EXTENT	TO SOME EXTENT	TO A GREAT EXTENT	TO A VERY GREAT EXTENT	NOT APPLIC-ABLE	DON'T KNOW/ CAN'T RECALL
e. Require substantial change from your previous teaching style?	0	1	2	3	4	N/A	?
f. Require change in the way your classroom is organized or managed?	0	1	2	3	4	N/A	?
g. Require substantial additional record keeping on your part?	0	1	2	3	4	N/A	?
To what extent							
h. Has it been difficult to implement this program or materials?	0	1	2	3	4	N/A	?
i. Has implementation of the program or materials helped solve the most pressing problem in your school?	0	1	2	3	4	N/A	?
j. Was it necessary to use materials from several R&D based programs in order to meet your need or solve your problem?	0	1	2	3	4	N/A	?
k. Was it necessary to develop additional materials locally in order to meet your need or solve your problem?	0	1	2	3	4	N/A	?
l. Has pupil achievement improved as a result of the use of the program or materials?	0	1	2	3	4	N/A	?
m. Have pupil attitudes or behavior improved as a result of the use of this program or materials?	0	1	2	3	4	N/A	?

11. About how many *hours* of training sessions (lectures, workshops, or meetings) did you attend? (Please check one response for each time period listed below.)

A. BEFORE YOU BEGAN USING THE PROGRAM OR MATERIALS IN YOUR CLASSROOM		B. DURING FIRST YEAR OF IMPLEMENTATION	
None	_____	None	_____
Eight or fewer hours	_____	Eight or fewer hours	_____
Nine to 24 hours	_____	Nine to 24 hours	_____
25 to 40 hours	_____	25 to 40 hours	_____
More than 40 hours	_____	More than 40 hours	_____

12.A. To what extent was the training or assistance you received for the use of these materials *ever provided* by the following individuals? (Please circle one response on each line.)

	NOT AT ALL	TO SOME EXTENT	TO A GREAT EXTENT
a. A specialist in your district or school	0	1	2
b. Other staff members in your district or school	0	1	2
c. The developer of the product	0	1	2
d. The linking agent	0	1	2
e. Other individuals from FLS	0	1	2
f. Other consultants outside your school district	0	1	2

B. How *useful* was the training or assistance provided by each? (Please circle one response on each line.)

	NOT AT ALL USEFUL				EXTREMELY USEFUL	NOT APPLICABLE DID NOT OCCUR
a. A specialist in your district or school	0	1	2	3	4	N/A
b. Other staff members in your district or school	0	1	2	3	4	N/A
c. The developer of the product	0	1	2	3	4	N/A
d. The linking agent	0	1	2	3	4	N/A
e. Other individuals from FLS	0	1	2	3	4	N/A
f. Other consultants outside your school district	0	1	2	3	4	N/A

Problem Solving Activities

13. A major feature of FLS is that it attempts to engage school staff in problem solving activities. In *your opinion*, did the following activities take the appropriate amount of time? (Please circle one response for each activity listed.)

	TOO SHORT	TOO LONG	ABOUT THE RIGHT AMOUNT →	DID NOT OCCUR	DON'T KNOW/ DON'T RECALL
a. Identifying the most important problem(s) or need(s)	1	2	3	N/A	?
b. Establishing criteria for selecting a solution	1	2	3	N/A	?
c. Searching for an R&D based program or materials	1	2	3	N/A	?
d. Selection of an R&D based program or materials	1	2	3	N/A	?
e. Planning for implementation of the R&D based program	1	2	3	N/A	?

14. In the first year of the FLS project, what *percentage* of participating teachers would you say were highly committed to the problem solving activities in the FLS project?

_____ %

15. What *proportion* of participating teachers are presently highly committed to the type of problem solving activities used in the FLS project?

_____ %

16. How would you describe your principal's current attitude toward the problem solving activities used in the FLS project? (Please circle one number.)

VERY UNFAVORABLE		NEUTRAL		VERY FAVORABLE
1	2	3	4	5

17. Many of the problem solving activities within the FLS are supposed to be carried out by a local planning team, steering committee or decision-making group. This team or committee may be based in your school or at your district level.

Are you aware of the activities of this team at your school or school district? (Please check one.)

Yes, and I have been informed of most of its activities ..... _____

Yes, but I have only limited information about its activities ..... _____

No, I am not aware of its activities ..... _____

No such team existed ..... _____

18. At any time during the past 3 years, have *you personally* been a member of the local team or committee?

Yes ..... ——
No ..... —— → If No, skip to Q. 20

19. During which phases of the program were you a team member? (Please check *all* that apply.)

While identifying the problem or need ..... ——
While searching for and choosing an R&D based program or materials ..... ——
While making plans for how to best implement the chosen program or materials in the school ..... ——
While actually implementing the program or materials ..... ——

20. Are you aware of the role of the FLS Headquarters and other groups in the FLS? (Please check one.)

Yes, and I am aware of most of their responsibilities and roles ..... ——
Yes, but I have only limited information about their roles and responsibilities ..... ——
No ..... ——

21. Are you aware of the role of the linking agent in the FLS? (Please check one.)

Yes, and I have been informed of most of his/her activities ..... ——
Yes, but I have only limited information ..... ——
No ..... —— → If No, skip to Q. 25

22. How much contact have *you personally* had with the linking agent named on the cover of the questionnaire? (If you have had contact with more than one linking agent, please answer this question and Questions 23 and 24 for the individual with whom you had the *most* contact.)

A lot ..... ——
Some ..... ——
Little ..... ——
None ..... —— → If None, skip to Q. 25

23. If you have had any contact with the linking agent, please rate him/her on the following items. Remember that no individual can perform all aspects of his/her role equally well, and please try to discriminate between his/her performance in the different areas. (Circle one response for each activity or attribute listed.)

LINKING AGENT ATTRIBUTES OR ACTIVITIES	POOR			EXCELLENT		DID NOT OCCUR	DON'T RECALL
a. Ability to explain clearly the purposes and services of the FLS	1	2	3	4	5	N/A	?
b. Helpfulness in specifying, analyzing and diagnosing our particular problems or needs	1	2	3	4	5	N/A	?
c. Helpfulness in developing criteria for selecting the solution best suited to our needs	1	2	3	4	5	N/A	?
d. Helpfulness in locating alternative solutions to our problem	1	2	3	4	5	N/A	?
e. Helpfulness in finding the best match between our problem and a solution. . .	1	2	3	4	5	N/A	?
f. Ability to help us understand how the R&D program or materials could be used	1	2	3	4	5	N/A	?
g. Helpfulness in adapting the R&D program or materials to our school or school district	1	2	3	4	5	N/A	?
h. Helpfulness in implementing the new program or materials	1	2	3	4	5	N/A	?
i. Assistance in locating additional technical resource persons	1	2	3	4	5	N/A	?
j. Availability to us when we need to talk to him/her. . .	1	2	3	4	5	N/A	?
k. Ability to resolve conflicts fairly	1	2	3	4	5	N/A	?
l. Skills as an organizer or coordinator	1	2	3	4	5	N/A	?
m. Assistance in evaluating our program	1	2	3	4	5	N/A	?

24. Linking agents may vary in the degree to which they take an active role in assisting a school that is adopting an R&D based program or materials. Please indicate below the degree to which he/she took initiative in helping to direct the activities or choices of local staff members in your school. (Please check one.)

Frequently . . . . . _____
Sometimes . . . . . _____
Rarely . . . . . _____
Never . . . . . _____
Don't Know/Don't Recall . . . . _____

25. Overall, *how satisfied were you* with the assistance, services, or support provided by the following individuals or groups in the FLS? (Please circle one response in each line.)

	NOT SATISFIED				VERY SATISFIED	CAN'T JUDGE/ DID NOT OCCUR	DON'T RECALL
a. The local school team	1	2	3	4	5	N/A	?
b. The linking agent	1	2	3	4	5	N/A	?
c. Other staff of FLS	1	2	3	4	5	N/A	?
d. Product developers	1	2	3	4	5	N/A	?
e. Other organizations or consultants from outside your school or district	1	2	3	4	5	N/A	?

26. To what extent do you feel that *you personally* have benefited from your school's involvement in the FLS in the following ways . . . ? (Please circle one response for each line.)

	NOT AT ALL	TO A LITTLE EXTENT	TO SOME EXTENT	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
a. My teaching skills have improved	0	1	2	3	4
b. My leadership skills have improved	0	1	2	3	4
c. I have learned about curriculum development	0	1	2	3	4
d. I have more self-confidence	0	1	2	3	4
e. Other school personnel rely on me more	0	1	2	3	4
f. I have new resources for helping other staff members . . .	0	1	2	3	4

	NOT AT ALL	TO A LITTLE EXTENT	TO SOME EXTENT	TO A GREAT EXTENT	TO A VERY GREAT EXTENT
g. I have learned more about the problem solving process	0	1	2	3	4
h. I have learned more about the availability of R&D based programs or materials	0	1	2	3	4
i. My job is more satisfying	0	1	2	3	4
j. I have been given more responsibility or have been promoted	0	1	2	3	4

27. We are interested in *your opinion* of the ways in which the following characteristics or factors changed in your school *as a result of your school's involvement in* FLS. (Please circle one on each line.)

	VERY MUCH WORSE	SOMEWHAT WORSE	NO CHANGE AT ALL	SOMEWHAT BETTER	VERY MUCH BETTER
a. Curriculum	1	2	3	4	5
b. Available materials	1	2	3	4	5
c. Teaching methods you use in your classroom	1	2	3	4	5
d. The way your classroom is organized or managed ...	1	2	3	4	5
e. The way your school is organized or managed ...	1	2	3	4	5
f. Degree of participation of teachers in making decisions about this school	1	2	3	4	5
g. Frequency of communication among teachers about curriculum, teaching techniques and lesson planning	1	2	3	4	5
h. Morale of the staff	1	2	3	4	5
i. The way specialists are used in your school	1	2	3	4	5
j. The ways in which problems are solved in your school	1	2	3	4	5
k. The image of the school in the community	1	2	3	4	5

28. Overall, the FLS involved a school planning team working with an external linking agent on a series of problem solving activities.

A. How different was this approach from previous attempts by your school to solve problems or to adopt new programs or materials? (Circle one.)

NOT VERY DIFFERENT				VERY DIFFERENT
1	2	3	4	5

B. Looking at the five statements below, please choose the *one* statement that best describes the extent to which your school has used the FLS problem solving approach to deal with *other* school problems. (Check one only.)

We are repeating (or have repeated) the approach to solve at least one other problem at our school ..... ____

We are adopting (or have adopted) *some parts* of the approach to solve another problem at our school ..... ____

We have not used the approach to solve another problem but we are planning *definitely* to use it in the future ..... ____

We have not used the approach to solve another problem, but we probably will in the future ..... ____

We will definitely *not* use this approach to solve another problem in the future ..... ____

I don't know whether the approach has been used again or whether there are plans to use it in the future ..... ____

29. Thinking about the goals of the FLS project at your school, approximately what percentage of those goals have been achieved?

_____ %

School and Personal Characteristics

30. In thinking about your school and the ways in which teachers interact with each other and participate in school decisions, please indicate *your opinion* of how true or false each of the statements below is in describing the current situation at your school. (Please circle one choice on each line.)

	DEFINITELY FALSE	MORE OFTEN FALSE THAN TRUE	MORE OFTEN TRUE THAN FALSE	DEFINITELY TRUE
a. Our school is open to change or innovation	1	2	3	4
b. Teachers call upon each other for help or advice in solving problems	1	2	3	4
c. Teachers cooperate with each other to achieve common personal and professional goals	1	2	3	4
d. Teachers call on administrators for help or advice in solving problems	1	2	3	4
e. There is tension between teachers and administrators in this school	1	2	3	4
f. There is tension between groups of teachers in this school	1	2	3	4
g. The school has a favorable image in the community	1	2	3	4
h. The principal of this school is a source of new materials, ideas and methods	1	2	3	4
i. Our principal spends most of his/her day handling administrative concerns and discipline rather than with issues of curriculum and teaching methods	1	2	3	4
j. I have many close friends among the staff members in this school	1	2	3	4
k. Recent innovations in this school have been more trouble than they are worth	1	2	3	4
l. Most educational innovations make the teachers job more rewarding	1	2	3	4

31. How many years of *full-time teaching experience* have you completed – not including the current year? (Enter a number in each line. Enter "0" where appropriate.)

Total years of experience ..... _____
Total years in present school ..... _____
Total years in present school district ..... _____

32. In how many *different* school systems have you worked?

Number of School Systems _____

33. What is the highest college degree you hold? (Check one only.)

No degree held currently ..... _____
Two year college diploma, degree or certificate ..... _____
Bachelor's Degree ..... _____
Master's Degree ..... _____
Education specialist or professional diploma based on 6 years of college study ..... _____
Doctor's Degree ..... _____

34. What is your sex?

Male ..... _____
Female ..... _____

35. Please indicate whether or not you are a member of any of the following professional organizations listed below. (Check one response for each listed.)

	MEMBER	NOT A MEMBER
National Education Association	☐	☐
American Federation of Teachers	☐	☐
State Education Association	☐	☐
Local Education Association	☐	☐
Subject-matter or other professional special interest association	☐	☐

36. *Other than meetings of a local education association,* how many professional meetings did you attend in the past year? (Please check one only.)

None ..... _____ Three ..... _____
One ..... _____ Four ..... _____
Two ..... _____ Five or more ..... _____

Thank you for your assistance. Please mail *this completed questionnaire* in the enclosed postage paid envelope within ten days.

FEDAC NO: S 47
Expiration Date: Aug. 30, 1980

LINKING R&D WITH SCHOOLS

A Study of the R&D Utilization Program
Principal Questionnaire
Fall 1979

Dear Educator:

Your school has recently been part of a nation-wide program sponsored by the National Institute of Education (NIE) called the Research and Development Utilization (RDU) program.* An important part of this program was to help teachers and administrators clarify and solve local problems more effectively. A major feature of the program in most schools was the involvement of a local planning team or steering committee composed of teachers and administrators. This team frequently worked with an outside linking agent** or facilitator to identify a particular problem in basic skills or career education and then to select and implement one or more research-based programs or materials*** to solve it.

One goal of the National Institute of Education in supporting the program was to learn more about the local school improvement process and the role that externally developed materials can play in making it more effective. To this end, Abt Associates Inc., a private social research firm, was awarded a contract to conduct a study of the RDU program.

A major source of information for our study is a survey of principals and a sample of teachers at each school which has participated in the program. We are asking you to complete a questionnaire this one time, providing information which will contribute to a better understanding of the needs and successes of schools as they attempt to solve locally defined problems. It will take approximately 30 minutes to complete this questionnaire, which you may then return directly to us in the enclosed postage paid envelope. The information on the inside cover of the questionnaire provides further details on the procedures we use to protect the confidentiality of all data we collect.

We would like to thank you in advance for your cooperation in helping us to learn about the RDU program in your school.

Sincerely,

Karen Seashore Louis, Ph.D.
Project Director

*You may know the name of the program as

_____

**According to our records, the linking agent who worked with your school was

_____

***Our records indicate that your school adopted the following research-based program or materials

_____

Abt Associates Inc., an applied social research firm, has been employed by the National Institute of Education to conduct a Study of the R&D Utilization Program. The information that you provide will contribute to a better understanding of how the problem solving process works in schools and the role that externally developed programs and materials can play.

Please be assured that your participation in this study is entirely voluntary. Although we urge you to complete the questionnaire in the interests of the study, your participation or non-participation will in no way affect your standing or your employment in the school. No member of the school district will have access to your responses at any time. To protect your anonymity your name does not appear on the questionnaire. The number on the lower right-hand corner of the cover is used to record the receipt of your questionnaire. No information about any individual respondent will be identified by her/his name or be identifiable in any reports published by Abt Associates.

All reports we compile will combine your answers with those of other professional personnel so as to respect your privacy and the confidentiality of the data you have given us. You may, of course, omit any questions which you consider to be objectionable. Your answers to all questions will be placed on a computer tape without your name, along with answers of other respondents.

Data being collected under authority of Section 405(b) (2) of the General Education Provisions Act, as amended, 20 USC 1221e(b) (2).

Personal Characteristics

1. **Please indicate the type of school in which you are employed. (Check one choice only.)**

Primary/elementary school ..... ____
Middle school ..... ____
Junior high school ..... ____
Senior high school ..... ____
Other (Please describe) ____
____
Not employed in a school ..... ____

2. **What is your current job title? (Check one choice only.)**

Principal ..... ____
Assistant principal ..... ____
Other (Please describe) ____
____

3. **For how many years have you been in your *current position*? If this is your first year in this position, please enter a "1".**

Years ____

4. **For how many years have you been employed *at this school*? If this is your first year in this school, please enter a "1".**

Years ____

5. **How many years of full-time teaching experience – not including this year – have you completed? (Please enter a number for each line.)**

Total years of experience ..... ____
Total years in present school system ..... ____
Total years in present school ..... ____

6. How many years of administrative experience – not including this year – have you completed? (Please enter a number for each line.)

Total years of experience . . . . . _____
Total years in present school system . . . . . _____
Total years in present school . . . . . _____

7. In how many different school systems have you worked?

Number of school systems . . . . . _____

8. Please list any professional organizations in which you are currently a member.

a. _____
b. _____
c. _____
d. _____

9. During the past year, what newsletters, journals or magazines discussing educational matters have you read on a *regular* basis?

a. _____
b. _____
c. _____
d. _____
e. _____

School Characteristics

Please answer Questions 10 and 11 either from your records or from your general knowledge. Please enter "0" if the answer is none. It is not necessary to make a special survey to obtain this information. Indicate how certain you are of your answer by circling one of the following for each response:

1 – VERY CERTAIN
2 – REASONABLY CERTAIN
3 – ROUGH ESTIMATE

10. Please describe the following characteristics of your school's staff:

		VERY CERTAIN	REASONABLY CERTAIN (CIRCLE ONE)	ROUGH ESTIMATE
a. Number of administrative positions	_____ #	1	2	3
b. Number of school-based specialists	_____ #	1	2	3
c. Number of non-school based specialists who work in your school periodically, but at least once a month	_____ #	1	2	3
d. Number of full-time teaching positions assigned to this school	_____ #	1	2	3
Of the NUMBER OF TEACHERS entered in Question 10d, what percent:				
e. Are male?	_____ %	1	2	3
f. Are teaching full-time for the first time?	_____ %	1	2	3
g. Are teaching full-time *in your school* for the first time this year?	_____ %	1	2	3
h. Have been teaching full-time for more than 10 years?	_____ %	1	2	3
i. Hold at least a master's degree?	_____ %	1	2	3
j. Are interested in trying out new teaching ideas?	_____ %	1	2	3

		VERY CERTAIN	REASONABLY CERTAIN (CIRCLE ONE)	ROUGH ESTIMATE
11. How many PUPILS are currently enrolled in your school?	_____ #	1	2	3
Of this NUMBER OF PUPILS, what percent:				
a. Have IQs greater than 120?	_____ %	1	2	3
b. Have IQs less than 90?	_____ %	1	2	3
c. Are one or more grades behind their grade level in reading achievement?	_____ %	1	2	3
d. Qualify for free or reduced cost lunches?	_____ %	1	2	3
Please estimate the PERCENT OF PUPILS in the following groups on the basis of your present knowledge.				
What percent:				
e. Are American Indian or Alaskan Native?	_____ %	1	2	3
f. Are Asian or Pacific Islanders?	_____ %	1	2	3
g. Are Hispanic?	_____ %	1	2	3
h. Are Black, not of Hispanic origin?	_____ %	1	2	3
i. Are White, not of Hispanic origin?	_____ %	1	2	3
j. Have a parent who is a college graduate?	_____ %	1	2	3
k. Have a parent who did not finish high school?	_____ %	1	2	3
l. Have a parent who is a white collar worker?	_____ %	1	2	3
m. Come from a family which is not composed of two parents?	_____ %	1	2	3

12. How would you describe the community in which your school is located? (Please check one choice only.)

A large city (over 250,000) . . . . . _____

A suburb near a large city . . . . . _____

A medium-sized city (50,000 – 250,000) . . . . . _____

A small city or town (under 50,000) not near a large city . . . . . _____

A rural area . . . . . _____

None of the above . . . . . _____

13. During a typical school year, many decisions must be made. Not all people influence any particular decision, and the degree of influence of different persons generally varies with the practices being decided upon. Please indicate, in your opinion, the degree of influence each of the persons listed below has on the following decisions in your school. (Please insert the appropriate code number in each box.)

0 = USUALLY HAS NO INFLUENCE
1 = USUALLY HAS MINOR INFLUENCE
2 = USUALLY HAS MODERATE INFLUENCE
3 = USUALLY HAS A GREAT DEAL OF INFLUENCE

DECISIONS	SUPERINTENDENT	PRINCIPALS	TEACHERS
a. Selecting texts and other materials.	☐	☐	☐
b. Establishing the objectives for each course.	☐	☐	☐
c. Determining daily lesson plans and activities.	☐	☐	☐
d. Adding or dropping courses.	☐	☐	☐
e. Hiring of new teachers.	☐	☐	☐
f. Deciding whether to renew a teacher's contract.	☐	☐	☐
g. Making specific faculty assignments.	☐	☐	☐
h. Planning new facilities or major changes in use of existing facilities.	☐	☐	☐
i. Establishing salary schedules.	☐	☐	☐
j. Identifying types of school wide changes to be implemented.	☐	☐	☐
k. Working out details for implementing school wide changes.	☐	☐	☐

R & D Utilization Project Activities and Outcomes

14. A major feature of the RDU project is that it engages school staff in a series of problem solving activities. Using the scale below – where 1 represents no involvement and 5 represents high involvement – please indicate the level of *your* personal involvement in the problem solving activities listed. (Circle one choice in each line.)

	NO INVOLVEMENT				HIGH INVOLVEMENT	NOT APPLICABLE/ HAS NOT OCCURRED	DON'T KNOW
a. Identifying the most important problems(s) or need(s)	1	2	3	4	5	NA	?
b. Searching for and choosing an R&D based program or materials	1	2	3	4	5	NA	?
c. Making plans for how to best implement the chosen R&D based program or materials	1	2	3	4	5	NA	?
d. Actually implementing the program or use of materials and monitoring its effectiveness	1	2	3	4	5	NA	?

15. The problem solving activities associated with the RDU project, such as those described in Question 14, are usually carried out by a local planning team, steering committee or decision making group composed of teachers and administrators. This team may be based in your school or at the district level.

Does (or did) such a team, group or committee exist in your school or district?

Yes ..... ___
No ..... ___
Don't Know .... ___

→ If No or Don't Know, skip to Q. 17

a. *If YES*, at any time during the past three years, have you personally been a member of the local team, groups or committee?

Yes ..... ___
No ..... ___

16. Overall, how would you describe your attitude toward the kind of problem solving activities that the team in your school or district engaged in?

VERY UNFAVORABLE				VERY FAVORABLE
1	2	3	4	5

17. As part of your school's involvement in the RDU program you may have had contact with a number of sources of assistance in support of your efforts. Overall, how satisfied were *you* with the assistance, services or support provided by the following individuals or groups in the program? (Circle one on each line.)

	NOT SATISFIED			VERY SATISFIED		DID NOT OCCUR	DON'T KNOW
a. The local school team.	1	2	3	4	5	NA	?
b. The linking agent	1	2	3	4	5	NA	?
c. The RDU project staff (excluding the linker)	1	2	3	4	5	NA	?
d. Developers of R&D based programs or materials.	1	2	3	4	5	NA	?
e. Other organizations or consultants from outside your school or district.	1	2	3	4	5	NA	?

18. How much contact have *you personally* had with the linking agent? (If you had contact with more than one linking agent, please answer this question and questions 19 and 20 for the individual with whom you had the *most* contact.) (Check one.)

A lot ..... ___
Some ..... ___
Little ..... ___
None ..... ___ → If None, skip to Q. 20

19. If you had any contact with the linking agent please rate him/her on the following items. Remember that no individual can perform all aspects of his/her role equally well, and please try to discriminate between his/her performance in different areas. (Circle one on each line.)

	POOR			EXCELLENT		CAN'T JUDGE/ DID NOT OCCUR	CAN'T RECALL
a. Ability to explain clearly the purposes and services of the RDU program.	1	2	3	4	5	NA	?
b. Helpfulness in specifying, analyzing, and diagnosing our particular problems or needs.	1	2	3	4	5	NA	?
c. Helpfulness in developing criteria for selecting the solution best suited to our needs.	1	2	3	4	5	NA	?
d. Helpfulness in locating alternative solutions to our problems.	1	2	3	4	5	NA	?
e. Helpfulness in finding the best match between our problem and a solution.	1	2	3	4	5	NA	?
f. Ability to help us understand how the R&D based program or materials should be used.	1	2	3	4	5	NA	?

	POOR				EXCELLENT	CAN'T JUDGE/ DID NOT OCCUR	CAN'T RECALL
g. Helpfulness in adapting the R&D product to our school or school district.	1	2	3	4	5	NA	?
h. Helpfulness in implementing the new program or materials.	1	2	3	4	5	NA	?
i. Assistance in locating additional technical resource persons.	1	2	3	4	5	NA	?
j. Availability to us when we need to talk to him/her.	1	2	3	4	5	NA	?
k. Ability to resolve conflicts fairly.	1	2	3	4	5	NA	?
l. Skills as an organizer or coordinator.	1	2	3	4	5	NA	?
m. Assistance in evaluating our program.	1	2	3	4	5	NA	?

20. The linking agents may vary in the degree to which they take *an active role* in assisting a school that is adopting an R&D based program or materials. Please indicate below the degree to which he/she took *initiative* in helping to direct the activities or choices of local staff members in your school. (Check one.)

Frequently ..... ____
Sometimes ..... ____
Rarely ..... ____
Never ..... ____
Don't Know ..... ____

21. Has your school or district selected an R&D based program or materials as a result of participation in the RDU program? (Check one.)

Yes ..... ____
No, we are still in the process of identifying the problem ..... ____
No, we have identified the problem but have not yet finished searching for the best solution ..... ____
No, we have searched for a solution but the products we have looked at don't seem to meet our needs ..... ____
Don't know ..... ____

→ If No or Don't Know, skip to Q. 28

22. Are staff members in your school presently using the R&D based program or materials? (Check one.)

Yes ..... ____
No ..... ____

→ If No, skip to Q. 28

23. The following questions ask you to report on the types of individuals and groups that may be affected by the R&D based program or materials that your school is implementing. Please give your best estimate for each of the following.

The PERCENTAGE of:

a. *Classrooms* in your school in which the product is used ..... _____ %

b. *Pupils* in your school with whom the product is used directly ..... _____ %

c. *Teachers* assigned to your school who use the product ..... _____ %

d. *Specialists* based in your school who use the product ..... _____ %

e. How many schools in your district, in addition to your own school, are using the program or materials? ..... _____ #

Among those who are using the program or materials in your school:

f. What is the approximate number of hours and fractions thereof (in minutes) in a typical teacher's week that are affected by use of the program or materials.

_____ HOURS _____ MINUTES

g. What is the approximate number of hours and minutes in a typical pupil's week that are affected by the use of the program or materials.

_____ HOURS _____ MINUTES

---

24. Please give us *your opinion* on each of the following characteristics of the R&D based program or materials by circling the most appropriate response. (Circle one on each line.)

To what extent	NOT AT ALL	TO A LITTLE EXTENT	TO SOME EXTENT	TO A GREAT EXTENT	TO A VERY GREAT EXTENT	NOT APPLI-CABLE	DON'T KNOW
a. Has pupil achievement improved as a result of the use of the program or materials?	0	1	2	3	4	NA	?
b. Have pupil attitudes or behavior improved as a result of the use of the program or materials?	0	1	2	3	4	NA	?
c. Has it been difficult to implement the program or materials?	0	1	2	3	4	NA	?
d. Has implementation of the program or materials helped solve the identified problem?	0	1	2	3	4	NA	?
e. Would it have been too expensive to adopt the program or materials without external funds?	0	1	2	3	4	NA	?
f. Will continued use of the program or materials be of reasonable cost to your school budget?	0	1	2	3	4	NA	?

25. Please indicate whether any of the following steps have already been taken or are planned to ensure that the R&D based program or materials adopted by your school will be continued. (Please circle one in each row.)

	WILL NOT OCCUR	MAY OCCUR	WILL DEFINITELY OCCUR IN THE NEAR FUTURE	HAS ALREADY OCCURRED
a. The program or materials have been formally incorporated into curriculum plans.	1	2	3	4
b. We have developed written guidelines for the use of the materials and methods from the program.	1	2	3	4
c. New staff will receive training or orientation in the use of the R&D program materials or methods.	1	2	3	4
d. We will continue to have training programs or inservice for current staff members to maintain the use of the program, materials or methods.	1	2	3	4
e. We have purchased new materials and supplies in order to maintain our use of the program or materials.	1	2	3	4
f. Because of the use of the program or materials written job descriptions for some staff members have been changed.	1	2	3	4
g. We have hired new staff members specifically to support the use of the R&D program or materials.	1	2	3	4
h. Our budget now includes a separate line item to support the use of the R&D program or materials.	1	2	3	4

26. Over the next few years, which of the following possibilities do you think is *most likely* to happen with respect to the use of the R&D based materials or methods among teachers at this school? (Please check the most appropriate response.)

The materials or methods will be dropped ..... _____

Some or all of the teachers will use the materials or methods, but they will not be used extensively ..... _____

Some or all of the teachers will use the materials or methods and they will generally be used quite extensively ..... _____

27. **The RDU approach is based on the use of R&D based programs or materials as a means of solving local school problems. Considering what you have learned about R&D based programs or materials during your school's involvement with the program, please indicate *how likely* it is that you will try to use these in the future: (Please check the most appropriate response.)**

We would turn to some R&D based programs or materials first, and consider adopting other types of programs or materials as a last resort ..... _____

We would probably try to find R&D based programs or materials first, but would also look for other possible solutions either locally or within the state ..... _____

We would try to find some R&D based programs or materials to review, but would not feel any preference for an R&D based solution over a locally developed program or materials.. _____

We would be unlikely to make a search for R&D based programs or materials in future efforts to improve our program ..... _____

---

28. **Overall, the RDU Project involved a school planning team working with a linking agent on a series of problem solving activities.**

How different was this approach from previous attempts to solve problems or to adopt new programs or materials in your school? (Circle one.)

NOT VERY DIFFERENT				VERY DIFFERENT
1	2	3	4	5

29. **Looking at the five statements below, please choose the one statement that best describes the extent to which your school has used the RDU approach to problem solving in dealing with *other* school problems. (Check one choice only.)**

We are repeating (or have repeated) the RDU approach to solve another problem in our school ..... _____

We are adopting (or have adopted) some parts of the RDU approach to solve another problem in our school ..... _____

We have not used the RDU approach to solve another problem, but we probably will in the future ..... _____

We have not used the RDU approach to solve another problem but we are planning definitely to use it in the future ..... _____

We will definitely not use this approach to solve another problem in the future ..... _____

I don't know whether the RDU approach has been used again or whether there are plans to use it in the future ..... _____

30. How likely is it that your school will use the following aspects of the RDU approach to problem solving to address future needs that may arise? (Circle one on each line.)

	DEFINITELY NOT USE	PROBABLY NOT USE	PROBABLY USE	DEFINITELY USE	DID NOT PERCEIVE A DISTINCTIVE RDU APPROACH
a. The use of a team or committee of teachers and administrators.	1	2	3	4	NA
b. The use of the services of an external linker.	1	2	3	4	NA
c. The approach to the process of identifying and improving in this school.	1	2	3	4	NA
d. The approach to identifying possible solutions to our problems.	1	2	3	4	NA
e. The approach to making a decision among alternative solutions to a problem.	1	2	3	4	NA
f. The approach to planning for implementation.	1	2	3	4	NA
g. The approach to implementation and feedback.	1	2	3	4	NA

31. We are interested in your opinion of the ways in which the following characteristics or factors changed in your school or school districts as a result of your school's involvement in the RDU program. (Circle one on each line.)

TYPE OF CHANGE	VERY MUCH WORSE	SOME-WHAT WORSE	NO CHANGE AT ALL	SOME-WHAT BETTER	VERY MUCH BETTER
a. Curriculum	1	2	3	4	5
b. Teaching methods	1	2	3	4	5
c. Available materials	1	2	3	4	5
d. The way the school is organized	1	2	3	4	5
e. Participation of teachers in making decisions about this school or school district	1	2	3	4	5
f. Frequency of communication among teachers about curriculum, teaching techniques and lesson planning	1	2	3	4	5
g. Morale of the staff	1	2	3	4	5
h. The way specialists are used in your school.	1	2	3	4	5
i. The ways in which problems are solved in the school	1	2	3	4	5
j. The image of the school in the community	1	2	3	4	5

32. Thinking about the goals of the RDU program at your school, what percentage of those goals have been achieved?

_____ %

Cost of Participation in RDU Program

33. In the following Table, we ask for information that will enable us to determine the personnel costs to schools participating in the RDU Program. We are interested *both* in total personnel costs and in costs incurred during each stage of the RDU process: 1) problem identification, 2) solution selection, and 3) solution implementation. It is important to emphasize that we are interested in your *best estimates or approximations.*

Your completed table might look like this:

			STAGES		
I. STAFF TYPE	II. NUMBER OF EACH TYPE	III. AVERAGE ANNUAL SALARY	IV. PROBLEM IDENTIFICATION	V. SOLUTION SELECTION	VI. SOLUTION IMPLEMENTATION
①	②	③	④ Oct. (MONTH) TO Dec. (MONTH)	Dec. (MONTH) TO Feb. (MONTH)	March (MONTH) TO June (MONTH)
			⑤ TOTAL NUMBER OF DAYS	TOTAL NUMBER OF DAYS	TOTAL NUMBER OF DAYS
Teacher	3	$ 12,000	7.5	15	22.5
Administrator	2	$ 19,000	6	6	17
Specialist	2	$ 14,000	5	4	1.5
		$			

NOTES:

1. List the *types of school staff* members participating in any stage of the RDU process, by job title.
2. Enter the *number* of school staff members *in each staff type.*
3. Estimate the *average annual salary* of each staff type, e.g., enter $12,000 as the average annual salary for the teacher staff type if three teachers have annual salaries of $11,000, $12,000, and $13,000, respectively.
4. Enter the *month* in which each stage began and the *month* in which it ended.
5. Estimate the total *number of days* (1 day = 8 hours) spent by each staff type during each of the stages, e.g., enter 7.5 person days under problem identification if three teachers spent 2.5 days each on that stage.

I. STAFF TYPE	II. NUMBER OF EACH TYPE	III. AVERAGE ANNUAL SALARY	STAGES		
			IV. PROBLEM IDENTIFICATION	V. SOLUTION SELECTION	VI. SOLUTION IMPLEMENTATION
			____ MONTH TO ____ MONTH	____ MONTH TO ____ MONTH	____ MONTH TO ____ MONTH
			TOTAL NUMBER OF DAYS	TOTAL NUMBER OF DAYS	TOTAL NUMBER OF DAYS
		$			
		$			
		$			
		$			
		$			
		$			
		$			
		$			
		$			
		$			
		$			
		$			

Thank you for your assistance. Please mail this completed questionnaire in the enclosed postage paid envelope within ten days.

APPENDIX E

Products Adopted by Schools in Six RDU Projects*

*Data on adoptions were unavailable from the National Education Association RDU project.

Table 6

Product Adoptions for Each RDU Project, by Spring 1979

NAME OF PRODUCT	PROJECT						
	Florida	Penn.	NRC	Mich.	Georgia	NETWORK	NEA
CAREER EDUCATION							
Crisp Co. (Ga.) & Orange Co. (Fla.) Career Education*					1		
Basic Skills Through Practical Arts					1		
Georgia Career Guidance					4		
It Works					6		
Locally Developed Career Education Handbook*					1		
Orange Co. (Fla.) Career Education					1		
Free To Be You and Me				2			
Careers: A Supplemental Reading Program				3			
Innerchange				2			
Project HEAR (1)				1			
Livelihoods				5			
My Bread and Butterflies Career Book				3			

Table 6 (continued)

NAME OF PRODUCT	PROJECT						
	Florida	Penn.	NRC	Mich.	Georgia	NETWORK	NEA
CAREER EDUCATION (continued)							
Career Awareness Exploration Curriculum Kit				3			
Freestyle				1			
Career Development Centered Curriculum (1)				7			
Getting It Together				1			
The Job Ahead				1			
The Magic Circle				2			
Employability Skills				3			
AEL Experience-Based Career Education Program (1)				1			
AEL Career Decisionmaking Program				6			
First Jobs				3			
Health: Decisions for Growth				1			
Career Exploration in the Earth Sciences (2)				1			
Michigan ACT Career Planning Program				1			

Table 6 (continued)

NAME OF PRODUCT	PROJECT						
	Florida	Penn.	NRC	Mich.	Georgia	NETWORK	NEA
CAREER EDUCATION (continued)							
Working With Trees (2)				1			
Introduction to Community Centers				1			
Career Opportunities Boxes				2			
Just Me (2)				1			
Career Development for Children				1			
Exploring Careers				1			
Valuing Approach to Career Education				2			
Goofy Goes to Work				1			
Kangaroo Kit				1			
Career Awareness K-6				1			
Doso Kits (American Guidance Assoc.)*				2			
Me and Others				2			

Table 6 (continued)

NAME OF PRODUCT	PROJECT						
	Florida	Penn.	NRC	Mich.	Georgia	NETWORK	NEA
READING							
Continuous Progress Reading *				1			
English/Reading Rotation Program (1)				1			
Project PAL (1)				1			
Secondary Reading Lab				1			
Individual Language Arts (1)		1					
Manlies Program, NY State Coordinated English-Language Arts *		1					
SMART (1)		2					
Sacajawea Plan (thru Precision Teaching and SDR)		2					
Perception Plus (1)		1					
SDR (1)		2					
Basic Spelling	1						
Wisconsin Design for Reading (2)	3		4			4	
Project MARC	2						
Open Court	4						
Exemplary Center for Reading Instruction-- ECRI (1)	1		1			4	

Table 6 (continued)

NAME OF PRODUCT	PROJECT						
	Florida	Penn.	NRC	Mich.	Georgia	NETWORK	NEA
READING (continued)							
Barnell Loft Skills	1						
SRA-Schoolhouse Comprehension	1						
FOCUS--Reading Curriculum* (1)			1				
Laubach Tutoring Program*			1				
Junior Great Books*			1				
Content Reading Inservice Package*			1				
Communication Skills Improvement Center (1)			1				
Intensive Reading Improvement Center (1)			1				
Dallas Basic Skills*			1				
Nampa Communication Skills*			2				
Miscellaneous Products developed by the sites*			8				
San Diego R2R			2			5	
Pegasus-PACE (1)						2	
Classroom Intervention Project (1)						3	

Table 6 (continued)

NAME OF PRODUCT	PROJECT						
	Florida	Penn.	NRC	Mich.	Georgia	NETWORK	NEA
READING (continued)							
Systematic Approach to Reading Improvement--SARI			4				
Houghton-Mifflin Basal Management System*			5				
Spellscript*			2				
Parents Assist Beginning Reading Management System*			2				
SWRL-Ginn Communication Skills Program			1				
Sustained Silent Reading*			1				
Reading Resource Center*			1				
Development of a Language Arts Scope/Sequence*			1				
Engleman-Becker Reading and Morphographic Spelling*			1				
Columbia River Developmental Reading Program			1				
Bay Area Writing Program*			1				
Holt Series and Management System*			1				

Table 6 (continued)

NAME OF PRODUCT	PROJECT						
	Florida	Penn.	NRC	Mich.	Georgia	NETWORK	NEA
READING (continued)							
Hawaii English Program (1)						1	
Individually Programmed Instruction(2)						1	
Project Catch-Up (1)						1	
Accountability in Primary Reading Program						1	
Vocational Reading Power Program (1)						1	
Andover Individualized Reading System						1	
Concepts and Language (2)						1	
Improvement of Basic Reading Skills (1)						1	
1976 Lippincott Reading Text and Management System						1	
MATHEMATICS							
STAMM (1)		1			3		
PRIMES		1					
Keymath	1						
Proficiency Verification Program With Learning Center Resources	1						

Table 6 (concluded)

NAME OF PRODUCT	PROJECT						
	Florida	Penn.	NRC	Mich.	Georgia	NETWORK	NEA
MATHEMATICS (continued)							
Brevard County LAMP	3						
Math Learning Systems	1						
SRA--Mathematics Involvement	1						
SRA--Mastery Test	1						
MISCELLANEOUS							
Evaluation Workshop from the Center for the Study of Evaluation* (2)					1		
SPECS--School Planning, Evaluation, & Communications System* (2)					1		
Wehauken Plan*					1		
Positive Attitude Towards Learning--PATL (1)		2					
Individually Guided Education (2)	1						

KEY

The NEA project did not keep a list of the products that were adopted by the sites.

* Product not in knowledge base

(1) Product listed in the NDN catalog

(2) Product listed in the NIE catalog

APPENDIX F

Criteria for Judging the Quality of Problem Solving

MEMORANDUM

TO: RDU Staff
FROM: Diane Kell
RE: An "Ideal" Problem-Solving Model (Revised)
DATE: 10/24/79

This memorandum sets forth the criteria for judging the extent to which the problem-solving activities of the RDU schools were congruent with sound problem solving and group decision making practices.

The criteria for sound problem solving (Part 1 below) are different for each stage, while the criteria for sound group decision making (Part 2 below) are the same for each stage.

The criteria may be given unequal weights. Some criteria may be more important for some sites than others, or may have been more outrageously disregarded in some sites. To decide upon a rating, think of each criterion as a possible debit. In general, a site should be given a "4" rating only if it has no debits, and a "1" rating only if it has four or more debits. These, however, are only rough guidelines, and you may use your own judgement.

Part 1: Problem Solving

Problem Identification

a. Problem specifications--i.e., searching for concrete problem indicators, analyzing perceived causes, and assessing specific needs--precedes search, selection, and implementation of a solution.

b. Alternative definitions of the problem are posed and considered.

c. Any special procedures that are adopted (e.g., needs assessment survey, writing of problem statements, discrepancy analysis) are carried out fully and appropriately.

d. Adequate evidence of the problem is obtained (though, in some cases, this may not require extensive documentation or new data collection and analysis).

e. The level of effort devoted to problem identification is appropriate to the circumstances.

f. Definition of problem is acceptable to a substantial majority of those affected by the decision).

g. Definition of problem is clear, manageable, and relevant to the situation; it is neither too narrow (trivial) nor too broad (grandiose).

h. Definition of problem is new, i.e., not a restatement of a priori assumptions about needs or the pet theory of a particular clique or individual.

Solution Selection

a. Problem is referred to an agent/agency for search of solutions (this may include, but should not be restricted to, members of the problem-solving group).

b. Conduct of search is objective, responsive to the problem statement, technically competent (i.e., "professional"), and thorough.

c. Clarification of problem is obtained when necessary.

d. Delivery of alternative solutions is expeditious (within reasonable or expected time period).

e. Evaluation evidence or other criteria of effectiveness or suitability are given to the school.

f. Selection process beings mainly after delivery of alternative solutions from the appropriate agent/agency. If locally familiar solutions are contemplated while the formal search process (as described above) is taking place, the final selection is postponed until the formal search process is completed and all alternatives are delivered.

g. Alternatives are carefully examined; their merits and demerits are assessed according to explicit criteria.

h. Additional information about solutions is sought (e.g., through site visits, consultation, etc.) or additional searches are ordered, when questions arise about the outcomes of the original search.

i. The level of effort devoted to selection is appropriate to the circumstances.

j. Solution is acceptable to a substantial majority of those affected by the decision.

k. Solution is new, i.e., not a practice or product that has already been implemented in the target school.

l. Solution is manageable, acceptable to administration or other external parties, and cost-effective.

m. Solution is relevant to original problem statement, likely to have the intended effect on students or staff, and in other respects high in quality.

Planning for Implementation

a. Constraints that will affect implementation are realistically assessed.

b. Administrative support and cooperation are gained for implementation.

c. Formal plans are drawn up to govern:

   1. leadership and staffing of implementation team
   2. field trials
   3. resource needs (money, materials, equipment)
   4. scheduling of treatment
   5. distribution of treatment among students/schools/staff
   6. training or staff development
   7. feedback or evaluation
   8. public relations with nonparticipating staff and community.

d. External linkers/consultants/agencies are exploited as necessary.

e. Measures are taken to ensure that the chosen product/program retains its essential features and goals in the course of implementation.

f. Adaptations of the product/program made prior to implementation are appropriate, judged according to whether the adaptation responded to:

   1. obvious defect in product/program
   2. genuine local needs of student or staff
   3. unalterable constraints in the situation
   4. special opportunities or leverages in the situation that allow for enhancement of the product/program's effect

g. The level of effort devoted to planning for implementation is appropriate to the situation.

Implementation

a. All elements of the implementation plan are borne in mind and realized in some form.

b. The actual scope of implementation (number or proportion of students or staff, frequency of use) is about right or greater than intended.

c. Difficulties in implementation are realisitically assessed and efforts are made to resolve them.

d. Administrative support and cooperation are gained or reinforced.

e. External linkers/consultants/agencies are exploited as necessary.

f. Measures are taken to ensure that the chosen product/program retains its essential features and goals in the course of implementation.

g. Adaptations of the product/program made after implementation are appropriate, judged according to the standards listed earlier (under Planning for Implementation).

Part 2: Group Decision Making

The criteria for judging group decision making practices are the same at each stage. These criteria are:

a. A formally constituted group is established or empowered to make the decisions related to that stage.

b. Meetings are held regularly (at least once a month).

c. Attendance at meetings is good, and level of interest seems high.

d. Composition of group represents those who will be directly affected by decisions.

e. Collection deliberation takes place, and democratic decision making is engaged in.

f. Conflict is managed well, and any tensions within the group are dealt with openly and efforts made to resolve them.

g. Leadership is accepted and appropriate.

h. Decisions are not subverted or dictated by administration or other external party (i.e., the group has both legitimacy and power to make decisions that are binding on local project).

i. Progress is made from one meeting to the next (i.e., the same issues are not recurrently addressed without evidence of progress toward their resolution).

For all stages subsequent to the first stage, there is an additional criterion:

j. There is sufficient continuyity in the membership of the group to ensure that it profits from the knowledge and experience of its members and to ensure that it is faithful to decisions made at earlier stages.